

PERSONAL COLUMN

David Lodge recalls in his novel *Small World* that, when in April the sweet showers fall, Chaucer's folk longed to go on pilgrimages. The only difference today, he says, is that professional people call them conferences.

I confess that I agree to give papers at conferences partly because I enjoy travel. During the Easter vacation I attended three conferences: on higher education at Oxford, literary criticism in Turkey, and on literature at the *Critical Quarterly* sixth-form conference in Manchester.

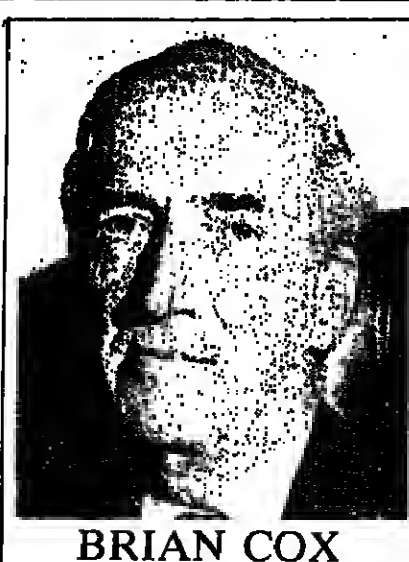
At Oxford, the Higher Education Foundation had asked me to talk about my concern for the undervaluing of the humanities, and the loss of support for higher education in its role in character formation, in developing the "whole man". I argued that the situation today is very different from the Victorian days when Cardinal Newman and Matthew Arnold published their famous apologies for a humane education.

The traditional argument for teaching the humanities is that we transmit cultural and moral values through the study of exemplary texts. In the days when Christian thinking dominated the schools, the main text was obviously the Bible. Today in universities we take it for granted that many students will be unfamiliar with the most famous Bible stories. When I teach T.S. Eliot's *Poetry*, for example, with its reference to Lazarus, the majority of students need the reference explained.

The Bible was studied alongside other texts such as the classics or the writings of Shakespeare, Milton or Wordsworth. The problem today is that the texts which dominate the 20th-century imagination are Kafka's *The Trial* and Camus's *The Outsider*. Samuel Beckett's *Waiting for Godot* and Ted Hughes's *Crow*. Such powerful works bewilder and shock the reader, dispelling optimistic humanist assumptions about progress and the power of reason.

It's vital that our students should study these modern texts, but not exclusively. As A-level is reformed, we must maintain access to pre-1900 great literature, for its insights introduce us to radically different kinds of sensibility and help us to see our own times in perspective.

I finished my talk at Oxford by reiterating



BRIAN COX

Change of face

'At conferences, my imagination wakes up, and I value talk with new people, from dons to dervishes'

my belief, often argued in this column, that students who are engaged in their own writing are most likely to respond positively to great literature. We need arts faculties in universities where students and staff are creatively involved with drama, film and the craft of writing, rather than exclusively confined to critical essays and a pseudo-scientific attempt to make a contribution to knowledge.

From Oxford, I travelled to Heathrow to catch a plane for Turkey, where I was scheduled to give lectures at an English literature seminar for university teachers. The conference was held at Anadolu University in central Anatolia. It was sponsored by the British Council, and as usual I was impressed by the hard work of its representatives, who achieve so much in promoting British culture.

Representatives from Turkey read papers on Chaucer, Sir Philip Sidney and Eliot. I've noticed before that in overseas countries a lively community still exists with an intimate knowledge of the English classics.

By a fortunate coincidence, my Oxford ideas were given a new slant in a lecture delivered to the Turkey conference by Dr Jeremy Treglow, editor of *The Times Literary Supplement*. He argued that, while academics have become too specialized, absorbed by the complexities of structuralist

and post-structuralist theory, literary criticism has been taken over by novelists. As an example he cited Julian Barnes's *Flaubert's Parrot* - shortlisted for the Booker Prize in 1984 - which is a brilliant mixture of fiction, biography and literary criticism, and should become a model for sixth-form and undergraduate writing.

On a day off from the conference we visited an old painter who turned out to be a dervish. After he'd shown us his house full of pictures, he honoured us by playing on the *ney*, a long bamboo flute which he dipped in water to improve the tone. I shall never forget the sad, haunting music he conjured from this strange instrument.

I've always associated whirling dervishes with religious hysteria, and know almost nothing about their beliefs and practices. The old artist was one of those rare holy men who seem already half-way to eternity. I admired his obvious integrity, his spiritual devotion which had persuaded him to bequeath his house and paintings to the local community. In his quiet room strewn with carpets, we seemed a million miles from Oxford and Heathrow.

On the three-hour bus ride back to Ankara across the dusty Anatolian plateau, the driver was assisted by a boy who looked about 14 years old and might have been his son. Soon after the journey began, he

brought round eau-de-Cologne and poured it generously into our hands. He was obviously proud to perform this service, and I admired a type of courtesy and hospitality which seems still normal in Turkey.

Two days after I returned to England, I found myself in charge of 460 sixth-formers attending the four-day *Critical Quarterly* conference on literature. I ended my Easter wanderings at a discussion session with five other colleagues fielding questions such as: "Do we need to know anything about an author's life to understand his writings?" "Should English courses include creative writing?" "Why is this panel of university teachers 100 per cent male while 90 per cent of the audience is female?"

I'm very proud of these conferences, which I've been organizing for more than 20 years. Students from different schools are surprised and excited to find themselves in the company of such a large number of people all enthusiastically talking about literature.

So now the conferences are over, what was the value of all these papers and discussions? I find my normal teaching life is a kind of prison, a repetition of hard work and stock situations which numb the mind. At conferences, my imagination wakes up, and I value talk with new people, from dons to dervishes. I hope my audiences experienced the same kind of stimulation.

NEXT WEEK

In praise of pay review
Trevor Clay, general secretary of the Royal College of Nursing, argues that a pay review body is the most effective negotiating forum for public sector workers

Testing, testing...
Sue Surkes looks at the level of testing already being done by local authorities in advance of Mr Kenneth Baker's national curriculum

On the ball
Football's first YTS Cup finalist
Bradbury in Bloomsbury
Ronald Hayman on literary London
Extra: Mathematics

NOTICEBOARD

PEOPLE...

The following have been appointed to headships of Roman Catholic schools in the Diocese of Southwark: Mr B. McCormack, deputy head of St Augustine's, Clifton, to be head of St Anne's, Canterbury; Mr P. Sellar, head of St Mary's, Deal, to be head of St Thomas More, West Malling; Mr G. Tanner, deputy head of St Thomas & Becket, Abbey Wood, to be head of Margaret Roper, Purley; Mrs L. Roberts, deputy head of Our Lady and St Philip Neri, Sydenham, to become head of St A's, Clarendon; deputy head of St Francis Cabrini, Forest Hill, to be head of St Joseph's, Crayford.

CONFERENCES...

May 13
Archaeology day conference for sixth-formers and A/O level. GCSE archaeology students and their teachers, at Dorset county museum. Fee £2 per person. Details from John Westbrook, Schools Organizer, Dorset County Museum, High Street, Dorchester, Dorset DT1 1XA.

May 15-16
The new teacher in school: undergraduate primary teacher education conference at Novotel, Coventry. Speakers include Professor Michael Bassey and Sheila Hall on links between BED and induction. Details from Ralph Statton, Charlotte Mason College, Ambleside, Cumbria LA22 8BL.

May 16
Association for the Study of the Curriculum north-east region on

Whose curriculum? Speakers include Glas Radice, Tim Bighouse, Peter Fulton and Jack Jones. Details from Paul Lamb, Sedgfield community college, Sedgfield, Cleveland.

May 16
Criteria in education organized by the World Education Fellowship and Kingston Polytechnic with Henry Pluckrose, Professor William Taylor and Dr James Hemming, of the Gipsy Hill Centre. Fee £12 (for 50 members). Details from Diane Monaghan, Faculty of Education, Kingston Polytechnic, Gipsy Hill Centre, Kingston Hill, Kingston upon Thames KT2 7LB.

May 16
Position in the family organized by the National Association of Teacher Therapists and Teachers in Multi-disciplinary Settings at Isledon Teachers' Centre, Blackstock Road, London N4. Details from Gill Eastaugh, 01-979 6542.

May 16
Books and readers - a one-day conference offering discussion workshops. Guest speaker Margaret Meek. Details from Ivo In-service Secretary, St Mary's College, Strawberry Hill, Twickenham, Middx TW1 4SX.

May 18
Support services for the primary school - to report the findings of the Economic and Social Research Council project, of Clarke Hall, University of London Institute of Education. Details from Mandy Lam-Hing, Department of Child Development and Educational Psychology, 24-27 Woburn Square, London WC1H 0AA. 01-636 1500 and 370.

May 21
Stuck for words - the case for dual language books organized by the British section of the International Board on Books for Young People in the Triangl Cinema, Aston University, Birmingham. Fee £17.50. Speakers include Ranjit Arora, Ming Tsow and Jean Kidner. Details from Shailo Ray, Tan-y-Capel, Bonl Dolgellau, Llanymynydd, Powys SY19 7BB.

July 27-30
The primary and secondary curriculum in a multicultural society - an HMI short course at Trinity and All Saints' College, Leeds. Workshops include languages in the curriculum, science and topic work, and school policy developments. Applications welcome from heads, deputy heads, postholders and advisory support teachers by May 15. Details from HMI Short Courses, DES, Elizabeth House, Room 4/25, York Road, London SE1 7PH.

May 9
In charge of INSET? - What is your school doing? - Centre for the Study of Comprehensive Schools workshops at York University. Fee £30. Details from Norman Barton, Wentworth College, University of York, York YO1 5DD.

May 9
Partnership: the true meaning - a talk by Anne Soler at the annual general meeting of the National Association for Primary Education at Ransley First School, Telford, Shropshire. Details from Rob

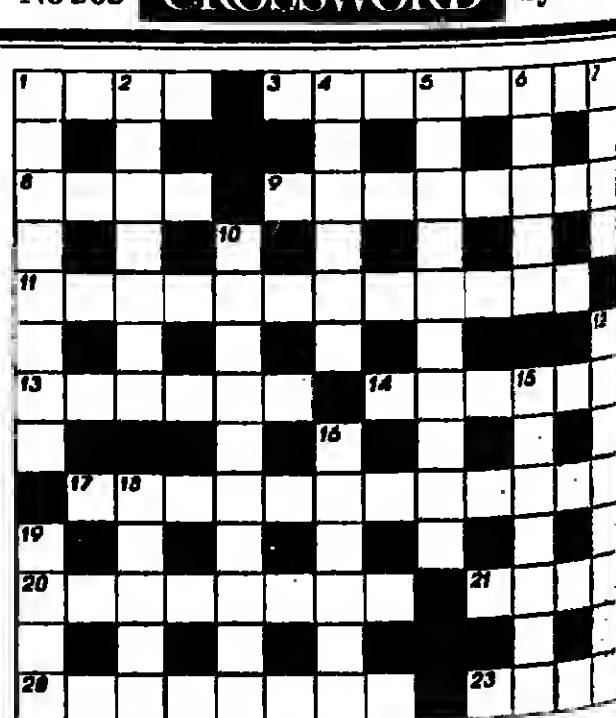
Devies, 1 Foxley Grove, Bilton Heath, Shrewsbury SY3 5DF.

Until May 16
Puppet shows and puppet-making workshops linked to the "Puppets from around the world" exhibition at Ipswich Museum Exhibition Gallery, High Street, Ipswich.

May 8
English literature and the television set is a day course for teachers focusing on *Flying into the Wind* by David Lealand and the role of the television text in GCSE English literature, at Malbourne House teachers' centre, Sheffield. The course will be of particular interest to those using NEA, MEG and LEA syllabuses. Details from Mrs Brenda Riches, Malbourne House, Teachers' Centre, 5 Malbourne Avenue, Sheffield S1 2OH.

John Grooms
The John Grooms Association, which provides accommodation, employment and holidays for the disabled, is appealing for fundraising help. Details of a video and publications are available from Miss Shirley Augustus, John Grooms National Office, 10 Gloucester Drive, Finsbury Park, London N4 2LP.

No 303 CROSSWORD by Rufus



Across
1 Entrance money (4)
3 Scratch game (8)
5 Chain letters? (4)
9 Small used in spelling contest? (3-2-3)
11 They may be roning the moment race is organized (12)
13 It's not the only one to succeed (2-4)
14 Passed shuffled cards (6)
17 I am under some order for a minor legal offence (12)
20 Sergeant out to part friends (8)
21 A sign of increasing significance (4)
22 Point to missile

Down
2 Ready to stand up to twisted fighter (8)
4 Ruth and I are upset about politician making a success (7)
6 Where rockets may be exposed (6)
8 Happy carol turns out not to be authentic (10)
10 Weapon that is a double-edged knife (6)
12 The corn crop's outstanding features? (4)
16 Where to yawn when it's late (10)

THE TIMES Educational Supplement

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Kenneth Baker, the Education Secretary, urges confidence in the new exam. With him are Lady Margaret Parkes, who chairs the Secondary Examinations Board's design and technology committee, and Mr Peter Burke, chief executive of the Southern Examining Group.

Chief HMI voices fears on national tests

by Geraldine Hackett

Her Majesty's most senior inspector is worried that introducing national tests in schools could be fraught with difficulties.

The schools inspectorate doesn't want national tests that would label a high proportion of young children as failures or the teaching in schools to the point of tests.

In its evidence to the Commons Education Committee on Education on Tuesday, Mr Eric Bolton, senior chief inspector of schools, conceded that there could be problems if the national tests proposed by Mr Kenneth Baker were introduced in this way.

Testing questions, page 17.

Questioned on whether children with special needs would benefit from tests at 7, 11 and 14, Mr Bolton said it depended on how specific the tests were.

"It is not known what kind of tests will emerge, but their impact will depend on how specific they are. If they are a record of what a pupil has done across a broad range of work, they ought to be a help in identifying weaknesses, which was taking evidence on special needs education.

Pressed as to what problems could be created by such testing, Mr Bolton

told the committee that too specific testing could cause teachers to concentrate on getting their pupils through the tests or could lead to a high proportion of young pupils being listed as failures.

"But if we have a system of assessment that gives a description of a pupil's performance across a range of activities it ought to be helpful," he said.

The inspectorate would express concern if inspections of schools found that teachers had begun to narrow their teaching. Outside the hearing, Mr Bolton said the potential problems involved in testing applied to all pupils, but would apply particularly to children with special educational needs following a common curriculum.

As an independent body, HMIs are at pains to stress they would not be opposed to the elected government tests - but merely feel it would be their duty to point out in any future inspections if it were found their introduction had led to a narrowing of the curriculum.

Meanwhile, Mr Norman Willis, the general secretary of the TUC, expressed concern after a meeting of the National Economic Development Council on Wednesday that the attainment tests would reinforce "failure" and not success.

Negotiating rights withheld till 1989

by James Meikle

The Government this week ruled out a restoration of teachers' negotiating rights before the 1989 pay round as it announced a Green Paper on future long-term bargaining machinery.

But the possibility of a return to traditional negotiations remains open, since one of the options to be considered may include a "development" of the advisory committee which will consult interested parties and report to Mr Kenneth Baker, the Education Secretary, on next year's pay arrangements.

The two biggest teachers' unions, whose leadership was again subjected to Conservative scorn, predictably decided to confound their strikes - although they promised to exclude examination classes from disruption. The National Union of Teachers and the National Association of Schoolmasters/Union of Women Teachers had said only the promise of a return to negotiations for 1988 would lead them to reconsider.

Mr Baker was given a platform to dress up old arguments in new clothes in the House of Commons on Tuesday when Labour "prayed against" the Government order which gives teachers the first stage of a 16.4 per cent settlement.

The minister romped through the virtues of his pay award and said teachers were now looking elsewhere for campaigning issues by picking on negotiating rights.

It was not realistic to expect agreement and legislation on a new negotiating machinery next year, he said. "We need some real thought, real reflection, real analysis, to find a long-term solution that is fair not only to teachers, but also to parents, taxpayers, ratepayers

and above all, children." Teacher unions, local authority associations, churches and parents would be consulted from the early autumn. A Green Paper would set out alternatives, including possible developments of the interim advisory committee, a review body coupled with a form of negotiation, and a national joint council, but not a return to Burnham. He also indicated a "strong case" for separate negotiations for heads and deputies.

Mr Giles Radice, Labour's education spokesman, said teachers were "bitterly resentful at what they see as yet another act of provocation by a hostile government". New conditions of service were being introduced when relations between the Government and teachers were worse than when Sir Keith Joseph was Secretary of State - "and that indeed is saying something".

Mr Baker was "not in the business of settling the teachers' dispute", he said. Mr Paddy Ashdown, the Alliance spokesman, while stressing his supporters would not vote against the order, said Mr Baker had created an issue about civil liberties "which has unified the teachers across their unions and has driven the moderate into the hands of the extremists, instead of isolating the latter to bring peace to our schools".

The Commons duly voted through the pay increase.

The unions continue to dispute the Government's reasons for the break-down in their meetings with Mr Baker, and are furious at a reply from Mrs Thatcher to their recent overtures over negotiating machinery.

"I see no value in my holding such a

continued on page 3

Employers wary of GCSE's new image

by Ian Nash

Employers are predicting that a Government video aimed at them on the merits of the new GCSE exam may perpetuate crude and damaging comparisons with the present CSE and GCE.

The fear was expressed repeatedly at the first in a series of eight regional seminars for bosses organized by the Department of Education and Science, hosted by the Southern Examining Group in Guildford this week.

It was symptomatic of a deeper concern that employers were losing sight of their priorities in education, with so many new initiatives demanding collaboration between schools and industry, including the Certificate of Pre-Vocational Education, the Technical and Vocational Education Initiative, the GCSE and a wider range of work experience schemes.

Mr Kenneth Baker, the Education Secretary, told 400 employers, managers and directors at the seminar: "Industry and commerce want the GCSE - they have told the Government that. So now you have it. Please support it and use it."

An information pack and 15-minute video - *That's GCSE* - featuring Esther Rantzen, will be used at all eight seminars over the next three months. An additional 2,500 are being mailed to the largest employers, chambers of commerce, professional bodies and careers offices.

The film includes a direct and simplified comparison between the GCSE and GCE at grades A, B and C and goes on to observe similar relationships between other grades and the CSE. Comments on the video varied from "entertaining" and "informative" to "juvenile" and "fatally flawed".

In the words of one employer: "We can consider all those with grades A, B and C and 'get the rest.' Most employers were less cynical and welcomed the reforms."

The SEG, like other examining groups for the GCSE, has an employment advisory committee which recommends ways in which industry and commerce can become involved in curriculum and syllabus development, and Mr Peter Burke, the group's chief executive, promised considerably more information about what the grades would mean.

For many employers, however, the problem was not the shortage of information but the abundance of it. No sooner would they have adjusted to the GCSE than they would have the national profiling scheme to contend with.

Many employers sympathized with the feelings of one educational officer for industry, who said: "For a couple of years, we will have to use a role of thumb and make comparisons between grades until we find a new way of looking at what GCSE results mean."

THIS WEEK	Pay review comparisons 4, 16	Testing times	Little read books	Bradbury in Bloomsbury	ITV schools 30 years on	EXTRA: Mathematics 53-68
<p>COMBAT SCHOOL TO WORK</p> <p>PRIMARY</p> <p>FOCUS</p> <p>NEWS</p> <p>LETTERS</p> <p>TRAVEL</p> <p>BOOKS</p> <p>ARTS</p> <p>RECORDS</p> <p>CLASSIFIED</p>	<p>2</p> <p>14</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> <p>36</p> <p>37</p> <p>38</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> <p>36</p> <p>37</p> <p>38</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> <p>36</p> <p>37</p> <p>38</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> <p>36</p> <p>37</p> <p>38</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> <p>36</p> <p>37</p> <p>38</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> <p>36</p> <p>37</p> <p>38</p>

Don't confuse me with facts

Mr Surkes' article on page 17 discusses some of the background issues raised by Mr Kenneth Baker's pre-election discovery of "benchmarks" and the boom in testing which it may presage. Those who suffer from long memories know that educational fashions come and go. One moment the sociologists are in the box seat. Next it is the turn of the administrators and the managers. They give way in due course to the psychologists and the psychoanalysts who have their field day before giving way, once again, to the sociologists.

Mr Baker's promise of national testing at 7, 11, and 14 is an elaboration of a Conservative election promise in 1979 which was quietly forgotten when power brought other, more pressing commitments. The difference is that, this time, there is the intention to specify a national curriculum which these regular external tests will monitor.

Or will they? Like a good deal of Mr Baker's on-the-hoop policy-making, there is a conspicuous absence of gritty facts and he has a disarming way of answering any request for more information by saying that he has a completely open mind on all points of detail.

Are the tests going to be "national"? Is some external body such as the National Foundation for Educational Research going to be charged with the task of devising "benchmarks" which can be applied across the country? As Mr Surkes shows, tests are used regularly in more than 70 local authorities to

provide a check on attainment and a wealth of diagnostic information. Nobody objects to tests as such. The whole argument is about how they are used and abused. Testing for diagnostic purposes is an essential tool for the good teacher, but testing for its own sake simply fills cupboards with dusty files. If schools have to be systematically resourced to act on the results, the financial implications are obvious.

The idea of "under-achievement" itself suggests a need for sophisticated measuring instruments. Mr Baker has recognized that benchmark tests will have to be sufficiently flexible - a contradiction in terms - to allow for wide variations in ability. A new industry could come into being trying to introduce criterion-referenced tests at every level, with grade-related criteria to allow for the full range of ability. The mind boggles as, no doubt, would those of the administrators, the pupils, the teachers and the parents. It is far from clear that this level of refinement can be achieved at GCSE, let alone in national tests at 7, 11, and 14.

What stands out is that raw test results will be of very little value. No doubt, raw tests could be scaled against IQ tests to reveal which children's performance was up to or below their IQ expectations, but this begs all the questions about the validity of mental testing which have kept the psychologists busy over the past 50 years.

The technical questions are difficult and, when Mr Baker says he has an open mind, what he really

means is that he has jumped in feet first without having taken the advice which a minister would normally arm himself with in advance. The more he presses for answers, the more questions he will uncover.

But in any case, what is at issue may not be the technology of testing and its limitations but the damaging unintended effects of massive testing on the quality of education. What is designed to be a quality control could so easily become a way of lowering standards. The more Mr Baker boosts the idea of tests as a major device for monitoring his national curriculum, the more surely it will come to dominate the classroom and have exactly the kind of limiting, narrowing effect on the work of teachers and pupils which he says he does not want.

And yet... it may well be that Mr Baker is right in his belief that parents want more information on their children's progress and more assurance that high standards are being achieved. School governors, too, in the new role assigned to them, may legitimately ask for better internal monitoring. The private sector has always assumed parents need regular reports on pupils' progress, backed up by internal exams, and many maintained schools have followed in the same tradition. By the time an election has come and gone, perhaps Mr Baker will slow down and look at ways of building on existing practice rather than imposing his own rigid system of formal but flawed testing on unwilling schools.

COMMENT

A bonfire of controls

Back in the dark ages - 1980 to be precise - Parliament passed an Education Act aimed at clearing up confusion about parental choice of school. "Parental choice" has always been a rhetorical form of the more limited notion of "parental preference". The procedures now operating date from then. Local authorities can set numerical limits on school size, and within those limits parents can exercise their preferences. Tribunals in each area deal with appeals and try to sort out hard cases.

As pupil rolls decline, the planning of secondary education makes the setting of maximum numbers a particularly important local authority function. If a local school system is to operate as a "system", it must make sense to try to use resources to the best advantage. This, of course, has been one of the most insistent messages in recent years, backed up by sensational reports from the Audit Commission and the Department's own insistence on each authority's obligation to "manage" its teaching force. Such management includes the duty to ensure that each school is staffed to provide a full and balanced curriculum. Curriculum-led staffing either implies a managed distribution of pupils among a range of secondary schools or open-ended commitments on resources.

Just at the moment, Mr Baker is not in a mood to discuss the financial implications of any of his proposals - nor yet are the proposals themselves firm enough for anyone to oppose them or support them with any rational certainty that they know what is involved. But the fact is that many current complaints arise because there is too little "system" at present: a move in the direction which Mr Baker is flagging would dismantle even what there is.

Another sure sign that an election is round the corner is Mr Baker's intention to reprove small schools threatened with closure. Many people will welcome this - there are few more unpopular things elected representatives have to do than order the closure of schools and face the inevitable

protests. Local politicians can only be expected to show a limited amount of bravery. Given the frequent failure of secretaries of state to back them up in the face of backbench pressure, they will welcome being relieved of this responsibility.

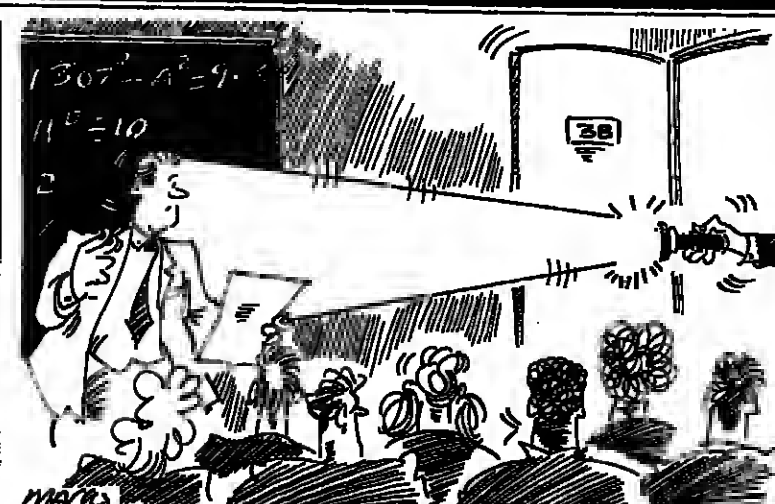
But somewhere in all this there are some awesome contradictions. Falling rolls and unlimited parental choice will speed up the emptying of schools. But small schools are to stay open because closing them is unpopular. A national curriculum is to be provided and monitored in all these schools, popular and unpopular alike. Teachers are to be "managed" so as to ensure that each school can offer a curriculum which is, in the immortal words of *Better Schools*, "broad, balanced, relevant and differentiated". But the schools themselves are not to be managed at all, but left to pseudo-market forces.

If you think that this does not really add up, you are unlikely to be alone. But just at the moment, Mr Baker is in the business of galloping votes, not expounding principles.

Torchlight on technique

"Torchlight Two" comes at a time when the appraisal goal-posts are moving very fast. When Duncan Graham and his Suffolk team published their first project report, *Those Having Torches*, in 1985, they were describing the state of the art. Even the Secretary of the State and the Industrial Society were prepared to accept the wise words of Mr Graham when he warned, having examined all available evidence, that no good appraisal system with built-in staff development could work if merit money was bolted on as well.

The second set of appraisal studies, *In the Light of Torches*, which has just appeared (page 7) concentrates on headteacher appraisal and classroom observation as well as training and costs, and as was to be expected his perceptive and constructive things to say on all subjects. But could anyone have guessed how many new factors the Secretary of State would fold into the works before it appeared, even bearing in mind the vulnerable nature of the pilot project?



Three issues in particular have come to the top of the list for consideration in any post-election appraisal scheme: the changing role of heads; benchmark testing as a factor in judging teacher performance; and Mr Kenneth Baker's imposed pay deal, with added rewards for good teaching.

Headteacher appraisal is clearly a delicate matter. Although the group of Suffolk volunteers were by the nature of things "confident, secure and successful practitioners", they were unconvinced that anyone but another practising head could have anything useful to say: governors may be consulted with and reported to, but they are not, of course, professionals; pupils are too immature; subordinate appraisal raises "a measure of disquiet". But would it be credible to the observer on the Clapham omnibus that heads (unlike in the team's experience) could only be appraised by their fellows? The conclusion is that only a team approach (which would, of course, include the participation of practising heads) can tackle this complex process.

Presumably that would hold good even as Mr Baker renders the process still more complex by constantly adding to the job description of heads - financial management, curriculum choice, PR - and detaching their pay deals from the rest of the teaching force. In fact, the report suggests with some prescience that in time the question of accountability "may lead to the posts of head, adviser, and of those responsible for inter-school relations in other education systems". That should keep them out of the classroom.

Except when they are appraising the performance of teachers, of course. The section on Classroom Observation begins with the words: "Teachers teach children and they do it mainly in classrooms" as introduction to the logical inference that this is where performance must be judged. And attention is drawn to experience in California where the response to teacher criticism of inadequate observers has been to make training in classroom observation obligatory for all school principals - chock up one more inset course.

At present, headteachers are struggling to allocate extra payments for good teaching without the benefit of appraisal systems to lend a semblance of fairness, and the pilot appraisal projects are in a state of suspended animation. The Torches team put up a constructive case for classroom observation as the heart of an appraisal system, but it could without too much difficulty be pressed into service to make judgements about pay rises, or whether sufficient pupils were hitting the right benchmarks. Or is that just what will stop good appraisal schemes like this getting off the ground?

no comment

"King's College, Taunton; Appointment of head: Candidates must be graduates of Oxford or Cambridge or some other recognized university."

Job advertisement in *The Times*, April 27.

Second Opinion

Another cup of water in the soup

Kenneth Baker's latest offer to parents, announced last Friday, is another so-called extension of choice. He wants to change the law to allow local education authorities to place pupils to popular secondary schools or, at least, to those which are important to their parents. It is a pretty funny way to win votes in elections. However, any suggestion that parents know best, or any suggestion of the magic word "choice", is greeted, in his view, to win support.

Is there not enough good choice to go round, Mr Baker, even today's lower numbers? Before we get into whose fault that might be, let us really think the way to provide it is to fill the popular schools with the bodies you can pack in with NSPCC noticing?

Presumably, those who have been so lucky in this unenviable task for the limited amount of education on offer will have to be the schools nobody wanted, the schools which decline to serve as a junior or a magistrate.

Let them close, you will say, how long will that take? And what of their pupils to go? Or let the prove, you will say. Pretty difficult when you have got into this downward spiral, and most of the parents were good at getting things off their backs.

Are you so sure they are schools, Mr Baker, or are schools with the wrong address? Teachers worked twice as hard to achieve what was a resource?

Let us look again at the backs of the ones who got into the schools. Are they so lucky? All schools were full in 1979, and then the needs of new subjects in the Technical and Vocational Education Initiative and GCSE have created the pressure on space for hardware, and on specialized facilities. If you fill every desk in every room, what about the labs, the shops, the computers, the sports?

Are you not just putting another cup of water in the soup? Not only diluting the education of the intake, but you are also robbing those who were there already, and perhaps destroying just those qualities which attracted them to the school. Everybody knows that pressure facilities brings danger and danger as well as dilution, and if you go step further and expand popular schools to take all corners, every whim of fashion, you are turning education into a shopping spree.

The argument is not about choice at all, but about how you do it without too much fuss something which is not enough of it. It is time for particular slights of hand were exposed to parents for the fraud it is. You do anything to divert attention from the real issues. It is a very expensive business educating the whole child might even be a bit subversive.

Cheaper by far, and safer, would be those who make a fuss into what is considered to be the private schools and turn the schools remain into educational soup. You can dilute soup quite a lot, and anybody noticing, as well, and push still further away the day when life has given less, and the exercise of parental choice is not unlike as we tackle positively the schools they have not chosen.

Joe Smith

Barry Hugill reports on the official investigation into allegations of racial violence at a Manchester school

Burnage inquiry to take evidence in closed session

The independent inquiry into the murder of a 13-year-old Asian pupil at Burnage High School in Manchester last September opened this week with strong criticism of Trafford education authority by the inquiry chairman, Mr Ian Macdonald.

Mr Macdonald, a senior barrister specializing in race and immigration law, criticized the authority's decision to allow Mr Nigel De Noronha, a lecturer at South Trafford College, Altrincham, time off to sit on the inquiry.

The inquiry is sponsored by Manchester City Council and will look at alleged incidents of racial violence at Burnage and other Manchester schools.

Mr Macdonald said on Tuesday that he regarded service on the inquiry "as a public duty comparable to serving as a juror or a magistrate."

He added that a discussion he had had with Mr Richard Mee, Labour chairman of the governors of South Trafford College, had led him to believe that the authority was behaving responsibly.

Mr Mee later confirmed that he had told Mr Macdonald that his first priority was the students' welfare and that to allow Mr Noronha time off would have seriously disrupted their education.

There are 20,000 people of ethnic origin in Manchester and there must be some with the capability and credibility to do the job that he wants Mr Noronha to do, I know many of the

Mr Macdonald, Trafford behaving responsibly

Continued from page 1

meeting," she wrote. "I believe that the witness should be focusing their energy on helping to improve the quality of education in our schools, and not on disrupting it or trying to undermine an Act of Parliament."

New pay machinery should be set up to allow local pay bargaining for teachers, Mr John Banham, the director-general of the CBI, told the National Economic Development Council this week.

Employers were very concerned at the continuing industrial relations problems in schools. Apart from the damage to young people's education, the example set for pupils on how to behave could hardly be worse, he said.

Unless governors and headteachers have some direct influence over what happens in their schools are paid, the responsibility will be largely cosmetic and unlikely to be effective in improving the benefits to the schools.

ethnic minority community, including surgeons, accountants and lawyers - many of them could do the job."

Other members of the inquiry committee are Mr Gus Jolin, a Manchester community worker, Mrs Lily Khan, director of Asian Studies at Tower Hamlets Adult Education Institute and Mr Reena Bhavnani, tutor in sociology at Ruskin College, Oxford. All three are being allowed leave of absence to take part in the inquiry.

They will look into the background of the murder of Ahmed Iqbal Ullah who was stabbed to death by a white pupil who was subsequently sentenced to be detained during Her Majesty's pleasure.

Asian pupils at Burnage have alleged that teachers turned a blind eye to racist bullying and intimidation. At the trial of the convicted youth, Manchester police said that there was no racial motive for the killing. Asian community leaders have ridiculed this claim.

Mr Macdonald has written to Mr James Anderton, chief constable of Manchester, asking for a meeting. The committee will sit in camera "because some witnesses could be frightened of making statements in public", Mr Macdonald said.

He anticipated that Burnage pupils would give evidence and that it was possible that they would make accusations against teachers. "We may well get allegations that teachers didn't act in time or didn't do the right thing."

Any teacher accused by witnesses will be informed of the charges made and will be given the opportunity to be represented, he explained. He stressed that the inquiry was not a "star chamber".

If allegations made to the committee prove to be true then it will be up to the L.E.A. to decide on disciplinary action, he said.

The inquiry is expected to take up to two months to complete.

Honeyford calls for race policy referendum

by Diane Spencer

Mr Ray Honeyford, the former head who was at the centre of a race row in Bradford, has called for a national referendum on multiculturalism in Britain.

Writing in the right-wing magazine *The Salisbury Review*, he asks: "Do we want assimilation, or a sort of cultural fragmentation which I suspect so disfigures the Swann proposals?"

"Or do we believe in the principle of cultural integration, where everyone is British, and where responsibility for the preservation of parent cultures is placed firmly on the shoulders of those immigrant communities who require them?"

The public must be consulted, he argues, because the greatest weakness in Britain's status as a multicultural society is the lack of a popular mandate for the changes which created it.

"It is only when this sort of process has been worked through that we can start to determine how our schools should be affected by these changes in our populations, which in historical terms are very recent."

"So powerful is the multicultural education, anti-racist lobby, which Swann supports, that the veritable revolution in our schools the report recommends is now being implemented."

In another article in the magazine, Mr Jonathan Savery, the Bristol teacher who faced disciplinary action last year over criticism of the anti-racist lobby, also returns to the attack, writes *Bert Lodge*.

He pours scorn on the anti-racist educationist whose idea of an enjoyable afternoon is to spend it "in hawk-eyed censorship" of the school's library. This character sees Robinson Crusoe not as "fiction vulnerable to serious criticism" but as an allegory of modern Britain describing and reinforcing prevailing racist attitudes. "Hence the urgent need for its confiscation as Unsuitable for Alltitudinally Impressionable Adolescents."

The article concludes: "Anti-racism is the instrument of a neo-colonialist minority who seek domination over our domestic territories and who wish to destroy for ever the culture that has grown and flourished there."

An introduction to *The Salisbury Review* points out that the magazine, edited by Professor Roger Scruton, is still withholding another article by Mr Savery on Rastafarianism, following "warnings" from Avon education authority.

The Salisbury Review, Volume 5, Number 3, April 1987, price £3.00 from Sherwood Press Ltd, 88 Tynney Road, London E7 6LY.



Smalltalk: Hillary Power, aged four, hands a petition with 11,000 signatures into 10 Downing Street on behalf of the Association for All Speech Impaired Children (AFASIC). It calls on the Government to make adequate educational provision for youngsters with speech and language disorders.

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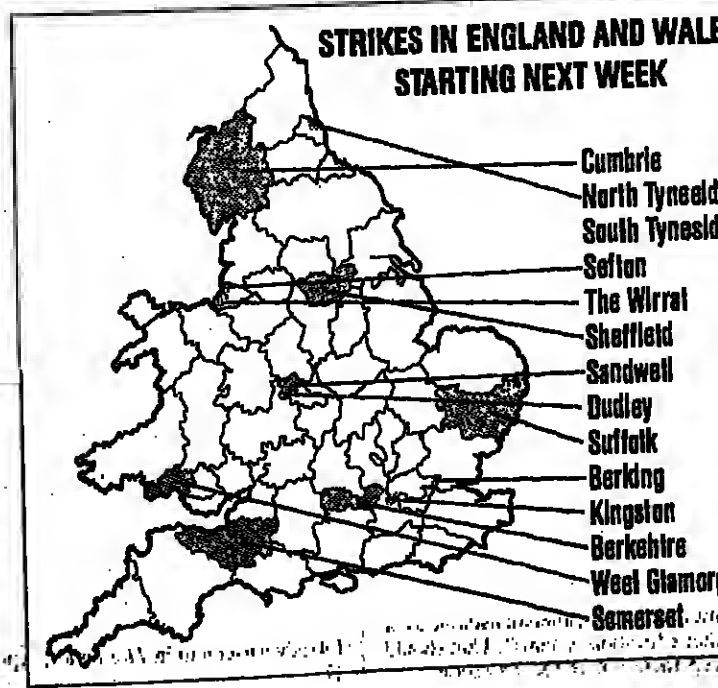
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Nurses and teachers, unlike industrial workers, cannot argue over their share of their employers' profits. But the old statutory machinery failed to keep up with economic events

In praise of pay review

There is no system of pay determination which will bring everything that we would wish as fast as we would wish. For nurses the establishment of a review body after the 1982 dispute has provided us with the longest consistent period of progress since the NHS was founded in 1948 and there is no better system on the horizon.

The nurses' review body covers 500,000 staff and accounts for more than £4 billion of public expenditure; £3 out of every £100 spent by Mrs Thatcher's Government is spent on nurses' pay. Every 1 per cent increase adds £45 million to the pay bill. In the number of people affected and the scale of public expenditure, very similar figures could be produced for the teaching profession.

Whatever the rhetoric of governments or trades unions, such major decisions for public expenditure are not simply going to be the subject of free collective bargaining as it is understood in industry and commerce. There is no straight company balance-sheet and division of profit over which to argue. The balance-sheet is increasingly public opinion and it is a democratic one. This fact needs to be recognized in the battle for resources over pay.

In the NHS we did have all the trappings of collective bargaining on a commercial, industrial model with the nurses' and midwives' Whitley Councils set up in 1948. They never really delivered the goods for our members and as inflation accelerated in the 1970s they were continually bypassed. Just as teachers had Houghton, so nurses had Halsbury in 1974. By the end of the 1970s we were wrapped up in the Clegg Commission. The statutory machinery had failed to keep up with economic events. By 1982 the system had again broken down.

The 1982 NHS dispute was a classic example of the fundamental difference



Trevor Clay, general secretary of the Royal College of Nursing, argues that the balance-sheet of public opinion is the best way of holding the Government to account

between the Government (under any party) and the unions. The health ministers had fixed cash limits which they were not at liberty to break. The unions were fixed on the course of comparability. Tortuous discussions were being held to find analogies for various groups of nursing staff while the ritual of claims and offer were gone through in the spring of each year. And it was a ritual in which members' expectations were raised beyond the negotiators'. Arguments and negotiations were subsumed in bluff and emotion. From that stalemate the 1982 NHS dispute was born.

The review body, which was the product of that dispute, was bound by neither cash limits nor the totems of comparability. It was to be able to take on board whatever factors it thought appropriate. Nor did its establishment end the negotiating rights of nurses. To replace the old Whitley Council, the Nurses' and Midwives' Negotiating Council was established. We still negotiate all the grading structures for nursing and the conditions of employment but it is the review body's job to attach a price to them. In theory, they should not work - in practice, it works considerably better than the previous system.

The Review Body for Nursing Staff, Midwives, Health Visitors and Professionals Allied to Medicine consists of eight people appointed by the Prime Minister and reporting to her. She is not obliged to implement or fund their

recommendations but the political pressure upon her to do so is considerable. In theory, a group of people appointed by the Prime Minister cannot be truly independent. In practice, they have demonstrated a more independent stance than any department of government with whom the unions would otherwise be negotiating. The 1982 dispute was settled with 12 per cent over two years, in its first report in 1984, the Review Body recommended 7.5 per cent. In 1985, increases of 9-14 per cent. In 1986, 6 per cent and this year, increases which add 9.5 per cent to the pay bill but which represent increases for all staff nurses and sisters of more than 11 per cent. It is an illusion to imagine that any minister could emerge from free collective bargaining in his or her department to tell Mrs Thatcher that the recommendation was far ahead of inflation as any of the above settlements and expect to keep his job.

On each occasion, the cash limits for the health service have had to be altered significantly and major changes introduced into the forward projections of public expenditure. The cumulative effect on the health budgets is considerable and the compound effect on nurses' pay on each increase is carried forward is seen by how far ahead of our previous best position against inflation in 1980 we

are. This year we will be negotiating professional clinical careers in which the review body will add a price. We expect this value to be higher than that currently given to clinical nurses and the turbulent committee years which appear to be ahead of us in government. In theory, it is bad trade practice to go for such structural change without the money to do it. It is true that in industry commerce it would be suicidal. But in the public sector, where the Government can be held to account by the balance-sheet of public opinion and where we also are accountable under public inspection.

In practice, the non-TUC Royal College of Nursing and the TUC-affiliated unions such as the National Union of Public Employees, led by Rodney Bickerstaffe, have been able to make the system work for members by taking a realistic view of the risks involved in going into a review body system.

In theory, there were no negotiations, a review body made up of political appointees cannot be independent, and all the recommendations could be rejected. In practice, the Conservative Government has thus far given more than a review body system and without our members being required to go through the process of withdrawing their services.

change where it was necessary, a system which rewarded those involved in clinical work and targeted the areas of the profession most in need of attention, even if they were not the most vocal sections of the membership. We are getting there faster under the review body than in the previous 40 years of arguing over the same issues.

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We want a system which produced just and fair salaries for our profession and then maintained them. A system which managed

DIARY

Guilt investment

Remember last week's story about the 1160 sent in a plain brown envelope to the Northern Ireland Department of Education? A cheerful lady from Stormont Castle has explained the mystery. It's all quite simple - Belfast people are very honest.

Well they are most of the time, but occasionally they have the odd lapse - a spot of tax avoidance, not returning library books, teachers misappropriating exercise books. They are, however, invariably struck by remorse and have devised a unique method of expurgating it. It's called "conscience money" and it works like this.

Mr X, head of English at the George Best High School for boys, does a few evenings a week private tuition. He forgot to declare it on his tax return and is later struck by guilt. Too ashamed to own up, he places a handful of used notes in an envelope and despatches it to his employer, the Department of Education.

He obviously can't sign it so the Department can't send him a receipt. Now he has to know that the cash has reached its destination? "It's easy," explained the cheerful lady, "we put a note in the local paper stating the amount where it was posted and when so that the sender knows that it has arrived."

Honest, it's true. And to prove it, here is the last such notice: "The Department of Education acknowledges receipt of £180 conscience money. The cash was received in an envelope post-marked Belfast and dated April 2, 1987."

Phoneme bill

Pushed by pronunciation, ruled by the phone? Help may be just a telephone call away.

It won't be cheap because you will have to phone Illinois, but why worry about the cost if, say, you want help in writing that important letter of application to be head of department.

All you do is give the "grammar hotline" experts at the State University a ring and explain your problem. Not only does it provide a useful service it brings in dollars for the university. Worth considering, Mr Wadman?

Tory wet

This year's use of English accolade goes to Guilford Conservative councillor Mr Bernard Barker. He wrote to area education officer Mr Tony Simpson, complaining that the choice of subject for a musical presentation at Howard of Eppingham county secondary school - the Titanic disaster - was "rather a distressing event on which to base a show."

In reply, Mr Barker helpfully quoted his remarks by saying he was "not wishing to pour cold water on the enthusiasm of youth."

Yuppie training

Further illustration that we're all Yuppies now on a specimen maths GCSE paper that has come our way. Question: "I need 188 cocktail sticks for a party and they are sold in packets of 30. How many packets must I buy?"

Key rings

Full marks to Mr Robert Key, Tory MP for Salisbury and one-time teacher and AMMA member. No slacker when it comes to constituency matters. He phoned Mr Bob Dunn, the education junior minister, only the other day congratulating him for accepting the sensible advice of the Member for Salisbury not to allow the closure of a popular local school.

As he was phoning from Newcastle it must have cost him a penny (or rather a centavo) or two.

The past week has been one of upheaval for the largest education authority in England and Wales - the Inner London Education Authority.

It began with one of ILEA's best-known headteachers, Mr Lawrie Norcross, announcing his decision to seek early retirement at the age of 60. His decision focused attention on the strains and stresses of being a head in London, with the war being waged between the authority and members of the Inner London Teachers' Association of the National Union of Teachers over redeployment and the pay dispute strike action.

Then followed the surprise nudging of the authority's Labour leader, Mrs Frances Morrell, in the annual leadership elections of the

A single vote led to Mrs Frances Morrell, the Labour leader of the Inner London Education Authority, being dislodged as its group chief on Tuesday.

Mrs Morrell, who has headed the ILEA since 1983, is to be replaced by Mr Neil Fletcher, formerly chairman of the authority's further and higher education sub-committee and currently employers' leader in the pay dispute with NATFHE, the college lecturers' union.

Mrs Morrell's fate was sealed once it became known that she intended to "retire" from the ILEA in the not-too-distant future. She told *The TES* last week that it could be a matter of "just two months" before she went.

Although many of the authority's councillors resented her somewhat imperial style, few doubted her immense ability and it is unlikely that Mr Fletcher would have won had his colleagues believed Mrs Morrell intended to stay around for some time.

In the event, many decided that it was wrong for her to enmesh the leadership once she had announced her decision to relinquish it at a time of her choosing.

Mrs Morrell's removal is a blow for the feminist lobby within the ILEA and marks a return to one councillor put it, "to the era of grey white men in grey suits running the authority".

Press reports that Mr Fletcher is the left of Mrs Morrell are somewhat wide of the mark. Like his predecessor, he had voted to take firm action against the Inner London Teachers' Association, whose members are opposing the authority's proposed redeployment scheme.

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Lahur group. Her high-profile leadership is to be replaced by the more sober style of Mr Neil Fletcher, formerly chairman of the ILEA's further and higher education sub-committee.

One of the main issues he will have to tackle is redeployment - but, as figures show this week, many ILEA teachers have already opted for a voluntary move.

Mr Peter Snipe, general secretary of the Secondary Heads Association, said: "Many of these opinions are shared by many heads in the authority, although I don't think they would be expressed in the extreme way Lawrie expresses them. There have been feelings during the year that the authority has not been prepared to support headteachers."

Mr Barrie Stead, chairman of the schools subcommittee, agreed leadership was a difficult job, but blamed the Education Secretary for the flow of directives which increased pressure on schools.

The ILEA has threatened for months to dock pay from teachers who refuse to cover for colleagues' absences, but the Labour group is refraining from taking action until it has tried to woo the unions, especially London's National Union of Teachers' branch, with a package of improved supply arrangements.

The authority's policy sub-committee will discuss the matter on May 20.

by James Melkile

Five Inner London headteachers died last year and 57 took early retirement. In all, 134 of the 1,100 heads in charge of Inner London Education Authority schools quit or changed jobs - but a spokesman thought the leaving rate was "about par for the course".

So far this year, 76 retirements or resignations have been reported. The figures come as the capital's heads continue to complain of stress and interference in school policy. They claim their employers jeopardize effective running of schools by not disciplining teachers for industrial action and their refusal to cater for absent colleagues.

Mr Lawrie Norcross, head of Highbury Grove comprehensive school in Islington, fuelled the debate by announcing that he was taking retirement five years early.

"ILEA members," he wrote in *The Times* on Monday, "show an signs of being prepared to sanction effective disciplinary action against teachers, however unflinching and sometimes downright irresponsible their actions may have been." He said the suspicion was shared by many heads that such members resented punishing those they regarded as their allies, the far Left of the teaching profession.

by Barry Huggill

Mr Fletcher conceded that there had been "a breakdown of trust between the authority, teachers and heads" and added that his task was to "build bridges".

He added: "The differences between me and Frances are those of style, not policies."

Mrs Morrell's defeat was one of a few surprises in the world of the London Labour Party this week. Its annual elections took place.

In Brent, Mr Ron Andersson remains chair of the education committee, despite an attempt to unseat him by his deputy, Mr Nalin Parshotam. The pundits had written Mr Anderson's political obituary following the decision of Brent Council's leader, Mr Merle Amory, to back Mr Parshotam. Fortunately for Mr Anderson, Mr Amory failed to grasp Labour's complex rule book so Brent councillors voted at the weekend to postpone the election.

A further contest will be held later in the summer - and it is anyone's guess who will win it.

And away from the attention of the media, Hounslow Labour Party moved significantly to the left when it deposited both its council leader and education committee chairman.

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Ian Nash looks at a new study comparing secondary schooling before and after abolition of the 11-plus

Comprehensives were doomed from the start, say researchers

The comprehensive experiment was bound to fail because it never was genuinely all-embracing, say the authors of a unique study comparing the selective and non-selective school systems.

Where secondary moderns were abolished, the baby was thrown out with the bath water in a desperate attempt to bring in grammar schools for all, according to Mr David Reynolds of University College, Cardiff, Mr Michael Sullivan, of University College, Swansea, and Mr Stephen Murgatroyd, until recently at the Open University.

"Secondary modern schools and their traditions were unwisely resisted as the new schools were formed, and it is time their strengths were rediscovered and blended with some of the existing grammar school traditions to generate authentic comprehensive for all children," they say.

In the mid-1970s, a community in Wales partially reorganized its schools, leaving one-third of all pupils attending the old selective secondary modern and grammar schools and putting the rest in to the new "comprehensives".

Both groups were as near identical as possible on a wide range of social and academic measures, and the two systems ran in parallel for four years. The results make gloomy reading for the non-selective lobby. Not only did the comprehensives underachieve academically but they did particularly badly by comparison socially. Selective schools were superior on a range of measures from reading tests to A level attainment where they gained 10 per cent more passes, with twice the number at A grade.

Delinquency rates were doubled in the comprehensive schools, where attendance figures also compared poorly. Average attendance rates were 88 per cent compared with 79 per cent in the selective schools. Greatest disaffection was shown by pupils in the bottom third of ability levels, whose attendance averages were 49 per cent compared with 83 per cent.

Indeed, it was the middle and lower ability pupils, who were alleged to be the losers under the selective system, that the comprehensives failed most consistently. Higher-ability pupils were catered for roughly on a par with the most able in the selective system.

The rot set in with the short-sighted, elitist policies of the Labour Party in the 1960s, say the authors, who point out that it was not as though there were not due warnings from the education profession.

"Seeing that the system of selection at 11 was both unpopular and discredited, knowing that grammar schools had status and respect in all sectors of the community, there were clear electoral advantages for the Labour Party to gain from embracing the notion of comprehensive schools as a grammar school for all."

That may have pleased the parents; 70.9 per cent of mothers in the selective research study area, the anonymous community of "Treliv", said it was their major goal to get their children into a grammar school - a clearly impossible prospect.

But in the "grammar for all" comprehensive schools, pupils voted with their feet. Truancy was selective with best attendance on days with subjects such as metalwork, woodwork, brick-laying and motor mechanics.

Paradoxically, the comprehensive schools entered more pupils for high-status examinations than did the selective schools. For example, in one year only 46 out of 101 pupils in the selective schools entered for O level compared with 123 out of 227 in the comprehensive system.

Comprehensives were failing for many reasons: the schools had poor management methods for their large size, they lacked pupil involvement, pastoral care provision was inadequate.

The rot set in with the shortsighted, elitist policies of the Labour Party in the 1960s

ate, relationships with parents were poor, and strict rules put too great an emphasis on the academic at the expense of social development.

The answer, say the researchers, is to shift attention away from the top one-third of the ability range who have proved more than able to cope, and to care more, socially and academically, for the lower two-thirds.

"The schools must learn that whether pupils actually attend, whether they are delinquent outside



Built up to be knocked down: secondary modern tradition was "unwisely resisted"

the school day, whether they have positive self-conceptions and whether they view themselves as in charge of their own lives are important educational goals - especially since there are a large number of lower-ability pupils for whom these are the only education goals that they are likely to attain.

"This is not to say, like one headteacher, 'that a lot of humanity is worth a hundred O levels' but to argue that, in a world where there is a greater chance of a child attending a university, such a reorientation of school goals towards social development seems only sensible."

None of the successful social aspects of the secondary modern were by their nature exclusive: pupils were encouraged to work in groups - prefects and monitors chosen from the whole ability range often inhibited anti-social behaviour among the rest, relations among staff and between teachers and pupils were genial, and discipline was "reward" rather than "punishment".

The good atmosphere improved matters not just for pupils but for teachers as well. Staff turnover was three times higher in the comprehensives than in the selective schools. The incidence of vandalism was also higher in non-selective schools. The authors call for a complete overhaul of the secondary school system, reaching many conclusions and recommendations that have also been made by several other major studies, including the Hargreaves' report on improving

inner-London secondary schools.

The authors of the new book, *The Comprehensive Experiment*, call for a fresh system of personal and social development based on "care" rather than "control", with posts of responsibility combining management and pastoral aspects and the encouragement of teachers to look after pastoral needs in their daily curriculum activities.

These views are almost wholly those that were advocated for all schools by the National Association for Pastoral Care in Education at its annual conference in Coventry last month.

School management could be further improved by involving rank-and-file teachers in management teams, improving communications regarding decisions, and publishing whole school policies and figures for truancy and vandalism as well as examination results.

Radical changes in home-school relations are called for, involving more parents in education and giving greater freedom for "informal visits" rather than merely labelling the institutions "community schools".

The authors also urge schools to relax the rules of "dress, manners and morals" associated with grammar schools and to involve more fourth and fifth-formers in clubs, societies and sports teams, encouraging less-able pupils in particular to take positions of responsibility.

Overwhelming evidence suggests that more-able pupils are not hampered by mixed-ability teaching and,

moreover, that the less able benefit. But the authors stress the introduction of mixed-ability groupings has been too slow.

Less movement between academic streams would encourage more social relationships. In comprehensive schools, academic promotion and motion meant that one in four pupils changed forms within the first two years compared with one in 10 in the secondary modern schools.

More tutorial support, particularly for middle-ability pupils, and less homework is needed. There was a greater emphasis on homework in comprehensives than in secondary moderns, but much of the 60-90 minutes' night was resented and left undone.

To argue that schools should be more concerned with all their children and to argue that social goals are as important as academic goals in modern society may be currently as fashionable in many quarters.

"But unless the schools manage to give all children the social development that parts of the education system have managed to in the past, together with intellectual development, that other parts of the education system have delivered, the future of British society will in our view be bleak," say the authors.

The Comprehensive Experiment by David Reynolds, Michael Sullivan and Stephen Murgatroyd, Falmer Press, price £14.95 hardback, £7.95 paperback.

Polytechnic figures rise

Applications to polytechnics have risen by 8,456 since last year, according to the Polytechnics Central Admissions System. This is an increase of 1.8 per cent.

The figures announced last week show a marked increase in the number of women applicants, which rose by 4.3 per cent. Nearly 59,000 women have applied, compared with just under 70,000 men. Overseas applicants have gone up to 7,932, which is a 13 per cent rise.

Combined arts courses have seen the greatest boost in popularity, with a 17 per cent increase in applications. Business and administrative studies remain most popular, having 115,000 applications, which is up by 8 per cent. Education (not teacher training) is up by 13 per cent.

Humanities had the greatest decrease in applications, down by 8 per cent. Other subjects which have fallen in demand are languages, by 7 per cent, and engineering and technology, by 5.5 per cent.

Tory group calls the tune on a stronger music policy

by Sue Surkes

The principle of direct grant funding to be applied to the city technology colleges should be extended to schools specializing in the arts and crafts, a pamphlet from the Conservative Political Centre has urged.

It also suggests that the assisted places scheme should be extended to more music schools and to other schools which foster artistic achievement in areas such as ballet and sculpture.

The document, whose five authors include two Tory MPs - Mr Robert Banks and Mr Alan Howarth - and Mr Stuart Sexton, former special adviser to Mr Mark Carlisle and Sir Keith Joseph at the Department of Education and Science, urges the Government to increase opportunities for all children to learn a music instrument.

It recommends amendment of the 1944 Education Act to allow parents to pay for musical instrument tuition at

state schools, while stressing that parents who are unable to pay should be offered support.

It also proposes the setting up of libraries of musical instruments which could be run by music shops, with public subsidy towards the capital costs of the instruments.

"There is a call on public money, but we believe this is justified," it says. The pamphlet emphasizes the need to maintain standards at GCSE level, and notes that the new GCSE in music, despite its "welcome" from the academic to the practical, "may not always demand a good enough overall knowledge of music, including the classical composers".

The Arts - The Next Move from the Conservative Political Centre, 22 Smith Square, London SW1P 3BU, price £2.75.

What the professor found at the end of the rainbow

Rainbow-coloured spectacles can help children and grown-ups who have difficulty in reading, an American researcher has discovered.

Professor Helen Irlen, former director of an educational learning disability programme at California State University, spent six years looking into the reasons why people cannot read properly. She was in London recently to lecture on her findings.

By a long process of elimination, she found that half of her sample of 3,000 had difficulty focusing on black-and-white glossy pages, especially under fluorescent lights. About 92 per cent of those studied could be helped by reading through tinted glasses ranging throughout the spectrum - from ultra violet to infra-red. Sometimes she used a mixture of colours.

Professor Irlen says her method has helped about 5,000 people in those countries where clinics have been set up - the USA, Australia, New Zealand, the Netherlands and the UK.

Diana Spencer reports on a novel method of helping people who have difficulty in reading

The Irlen Institute in London has already helped 200 people by providing coloured lenses. One satisfied customer is 13-year-old Paul Chamberlain who goes to Bethany School, a private boarding school in Kent. He was diagnosed as dyslexic five years ago and has been using purple lenses since last December after an assessment at the institute.

Mrs Mary Chamberlain, his mother, said three of his teachers had already noticed an improvement in his work and his writing was so much better it was as if it had been done by a different child.

Even in an audience of educationists, she says she finds some with

"scotopic sensitivity syndrome" - which she defines as a distinct type of visual dyslexia related to difficulties with light source, intensity, and colour.

"I only have to ask: Do you find it easier to read in daylight? How long can you read for? Do you prefer to read print on a colour instead of white?"

And she often finds someone who notices a dramatic difference immediately they try colours overlaid on black and white print.

But Professor Irlen stresses that her method will not make children read, neither is it a cure for dyslexia. However, it can help some, like Paul, who find it hard to focus and others who can only distinguish one word at a time with the rest distorting, even dancing on the page.

The Irlen Institute, Lansdowne College, 43 Harrington Gardens, London SW7 4JU.



Colourful spectacles 5,000 people are said to have benefited from Helen Irlen's (right) techniques

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Ulster fears drift from state sector

by Cermel McQuoid

Teachers in Northern Ireland are worried that the growth of private Irish language and religiously-integrated schools is fragmenting state education.

The annual conference of the Ulster Teachers' Union in Newcastle, County Down, argued that, while the philosophy of the new trends was to be applauded, immediate action was needed by the Province's Department of Education to counter the "dramatic growth" of the independent sector.

The luxury of splintering the system at a time when shortage of money was so crucial could not be afforded.

The conference urged Dr Brian Mahon, the Northern Ireland Education Minister, to recognize the controlled schools as integrated - and set up a working party to investigate the problem.

Proposing the motion, Mr Cullin Meade, of the union's Belfast branch, demanded that "artificial balances of Catholic and Protestant numbers" should cease to be the vital criterion for a school to be deemed integrated. The controlled schools were non-sectarian, catering for non-Christian religions, for those who held no faith and for Christian denominations.

He said that, since the Department had allowed the notion to prevail that controlled schools were sectarian, it must take part of the blame for Ulster having a larger proportion of pupils educated outside the state system than anywhere else in Europe.

He refuted the assertion that controlled schools with Catholics on roll could not be termed "integrated" because no concession was being made for different cultural or religious instruction.

"To imply that we treat our children differently because of their religious beliefs or lack of them is an unacceptable slur on our professionalism," he said. But the favourable terms offered to new schools - 85 per cent building and equipment costs - would result in further disintegration of mainstream education.

● The conference also agreed to stop supervising the 11-plus from the next school year, because of the education boards' failure to press the Department to scrap the exam.

Iola Smith talks to Wayne Williams, the Welsh language activist who has just become vice-president of UCAC, the Welsh-speaking teachers' union

A passionate campaigner who minds his language

Wayne Williams almost lost his job after serving a six-month prison sentence on a conspiracy charge, following damage to broadcasting equipment during the campaign for a Welsh language fourth television channel.

Now, six years later and promoted within his old school to head a department, he has become vice-president of his union, UCAC - the 3,000-strong Welsh teachers' union.

"Each child in Wales should have the opportunity to learn Welsh and be educated through the medium of that language if he or she wishes," he says - re-emphasizing the policy of his union which is campaigning for an independent Welsh language development body with a £20 million budget to co-ordinate bilingual education from nursery to university.

He doubts whether a Welsh Joint Education Committee subcommittee would have the resources to undertake such a task, which has implications for schools' staffing as well as language policies.

"In Welsh-speaking heartlands, such as Gwynedd and Dyfed, I feel that heads and staff should be fluent in Welsh, and schools will not be able to increase the number of Welsh medium course options."

He says non-Welsh speakers should be sent on mandatory intensive language courses at L.E.A.s' expense - willingness to attend should be a condition of appointment.

Mr Williams pays tribute both to the contribution of designated bilingual schools in the Anglicized areas, and to the Welsh language voluntary nursery schools which he believes should be established in every area assisted by the L.E.A.s.

His commitment to the Welsh language runs deep. Until recently he was active in the Welsh Language Society; in 1981 he was jailed for his part in the society's campaign for a Welsh television channel. He returned to Llanidloes High (the Powys school where he had worked since 1979) on his release, a move some parents attempted to prevent with a court injunction. He eventually won, and took up his full-time duties again in 1983. He was promoted to head of the Welsh department a year later.



Wayne Williams: down the bilingual road

Since then the school has become more pro-Welsh, although in a predominantly English-speaking area. History and geography can now be learned in Welsh in the lower school, and could be extended to GCSE level soon. All pupils take Welsh in the first three years, with more than half - 45 in this year's form four - opting to continue with the language. They are taught in separate groups for learners and fluent speakers.

Since entering teaching in the late 1970s, he has climbed steadily up the union ranks from local chairman, through to representing UCAC at county level, to vice-president.

He is convinced his involvement with the Welsh Language Society has proved useful in union affairs, "because it taught me how local authorities and committees work. It also proved to me that dedication can yield results - such as the bilingual road signs and S4C (Wales' fourth television channel) campaigns. That is why I am convinced that UCAC's demand for the universal availability of Welsh education for those who wish it will eventually be realized. Already, most of our members are active in promoting bilingualism, as the majority teach in Welsh."

UCAC's function is to support such teachers by calling for an increase in Welsh educational publishing and developing Welsh medium course op-

tions. And because of its specialism in bilingual issues, it feels it should be represented on any new negotiating body, even though it had no seat on Burnham.

But linguistic issues are not the union's sole concern. It is fiercely opposed to Kenneth Baker's removal of teachers' negotiating rights and believes all marking, exam preparation and report-writing should be done in school hours only. However, the union feels teachers should be free to run extra-curricular sports or Welsh League of Youth activities.

Mr Williams readily admits morale is low because of concern about working conditions, the introduction of GCSE and pay. "The present salary isn't worth the effort, so it isn't surprising that young teachers leave the profession, that fewer apply for teaching jobs, or that sixth-formers decide against a teaching career."

He wants to see increased collaboration between teacher unions in Wales, but believes that a political change of heart is the only real answer to low morale. "The Government must realize that education is important, and that teachers should be treated as sympathetically as the police and armed forces. Only then will the profession avoid potentially acute recruitment problems in the next decade."

Baker fails to do his star turn

by Ian Nash

Mr Kenneth Baker missed a chance to see a model of educational efficiency, and in so doing alienated more than 1,800 future voters who backed out of an A level OCE (Oxford-Cambridge Educational) revision seminar at Westminster last week.

The Education Secretary, in the largest ever one-day seminar, sixth-form pupils but he was "caught between two Government committees", minutes before he was due to address the students.

The substitute, Mr Alastair Burt (Mr Baker's parliamentary secretary), put on a spirited performance; although many pupils noted speech "O level politics level", compared with what they were told to expect.

The announcement of the last-minute substitution was met with jeers and cries of "That's Baker down the drain" and "Don't mind Ken, we're only kids, we're not so important."

The organizers of the increasing popular event, the non-profit-making Education and Training Seminar, were more than willing to renege on the timetable for the convention. Parliament, and could not hide the disappointment.

Mr John Oliver, seminar chair and dean of business studies at the field Polytechnic, said: "I am here for the economics, but I am sure many were attracted by the possibility of hearing him."

Nor did he think it reflected well on Government attitudes towards work and education. "It would have been good advertisement for Mr Baker," questioned by a A level student."

Mr Burt got off to an inauspicious start with a condescending speech.



Alastair Burt: redeemed

the role of the private secretary and noted version of his boss's speech on the indispensable merits of conservatism to a sceptical and politically literate audience.

Describing himself as a "Tory Boy" and a new boy at Westminster who still learning, he then rattled off students by saying: "You might say I am an MP on the YTS."

Angry students facing an uncertain future on the Youth Training Scheme were quick to snap back with: "You might say that. But if you are, you're damned well paid."

Mr Burt redeemed himself, however, in a heated debating session which focused on the teachers' action, crumbling buildings, and educational spending cuts (which he insisted had not happened). Somehow, a few economics seemed all rather irrelevant until Mr Oliver returned to the podium.

The college lecturers' union, the National Association of Teachers' Further and Higher Education, is being asked to back a campaign for grants.

Mr Baker is awaiting completion of a European Commission study which will produce new ideas for school exchanges throughout the world.

The Government has ruled out a Market aid for teenagers who want to go abroad as part of their foreign language studies.

Mr Kenneth Baker, the Education Secretary, says it is unrealistic to expect the European Commission to pay for visits on such a large scale. There is no central Government fund.

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Polytechnics warn of computer crisis

by Ian Nash

Student teachers face a loss of access to computers in many colleges and polytechnics because the Government refuses to meet the costs of new equipment, Dr Norbert Singer, director of Thames Polytechnic, warned last week.

The four areas of study in greatest jeopardy from the shortage in the 57 polytechnics and colleges of higher education were science, technology, teacher training and craft, design and technology.

For four years, the colleges have fought a losing battle for more money for computers and equipment from the Department of Education and Science. Annual awards are made through local education authorities, based on the claims for individual institutions.

But the gap between the money bid and the sum awarded grows wider. Last year, the Inner London Education Authority asked for £10 million for five polytechnics but was awarded only £2 million. Thames needed £1.6 million, but was given £400,000. "Next year, we will need £2.5 million just to stand still. Unless we find major new monies to close that gap, we will be in disaster next session," Dr Singer told ILEA and polytechnic officers at the annual advanced further education review last week.

"It is a national problem, but London has been hit the worst," he said, citing evidence in replies to recent parliamentary questions. "The ILEA has been treated particularly harshly in terms of its capital expenditure."

Much of the equipment was decades old and many students had no access to information technology at all. "A particularly significant concern" was the lack of computer equipment, and an immediate £600,000 was needed to update stocks, he said.

Any crisis in teacher education had been postponed with the help of a £130,000 grant for craft, design and technology from the Manpower Services Commission to Avery Hill College, which recently merged with the polytechnic.

"Our teacher training is therefore in good shape technologically, but that is sheer luck," he said. In the long term, all disciplines were threatened if the Government failed to wake up to the needs of all colleges.

Both teachers and students had increasing expectations since schools were becoming significant users of new technology, and it was no longer possible to provide for all the needs of the arts and humanities with papers and books alone. "Because of the increasing demands, polytechnics have less money to spread among many more pupils," he said.

● White Paper proposals giving corporate status to colleges and stopping I.C.U. subsidies "imperial" the quality of education in London by failing to account for the unique relationship between the ILEA and its five polytechnics, the Committee of Directors of Inner London Polytechnics said this week.

The ILEA paid £11 million (14 per cent of total budgets) this year, for a range of services such as part-time and evening work, access courses for women and ethnic minorities and continuing education. "These activities add costs not adequately funded through existing national mechanisms," said the directors.

Sue Surkes reports that pessimism dogged educationists as they met last weekend to discuss public policy development

History syllabus 'a ragbag'

The syllabus proposed by the Historical Association for all 7 to 14-year-olds could generate something "close to civil war" in the classroom if it is pushed through by the Education Secretary, a public education policy seminar heard last weekend.

Mr Tom Arkell, a senior lecturer in Warwick University's arts education department, claimed that the association was "proposing an irresponsible return to a mythological golden age of history teaching" and encouraging discussion of a syllabus that had been "abandoned after decades of heartache".

The proposal, submitted to Mr Kenneth Baker at his request earlier this year, suggests that at least 60 per cent of teaching time be devoted to 60 topics in British and world history up to 1890.

Mr Arkell told the seminar at the university that the document was the "greatest ragbag, lucky-dip sort of syllabus anybody could have devised". It lacked any conceptual coherence or structure, most of its topics were totally irrelevant to twentieth century children, and it took no account of changes in society over the last generation.

Furthermore, the media had taken away the need for school history teaching to sustain any sense of national identity.

His proposed rejection of the syllabus and the setting-up of "representative" forum to discuss the issues in a "coherent and intelligent way".

Dr John Fines, head of history at West Sussex Institute of Higher Education, said the association, which had done many good things, had felt deprived for many years.

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It was "quite understandable that, when the Secretary of State suddenly smiles at it in a very seductive way, it should come over all shyness and lose its head". But the "speedy" response of the association was an "extremely dangerous example of responding to ministerial edict".

Mr Norman Thomas, an honorary professor of education at Warwick and a former HM Inspector, said: "If you do not like the Historical Association, what you need to do is get into it and change it."

The atmosphere at the conference was one of intense self-analysis and pessimism. Mr Jim Campbell, one of the organizers, described the day as "depressing, paranoia-inducing and only occasionally enlightening".

School history teaching was in a state of confusion, the assembled academics, chief education officers, advisers and others were told. There was talk about the divide between those who believed the syllabus should be based on skills and concepts and those who preferred a content-oriented approach.

The issue of whether history at primary level should be taught as a separate subject or integrated was also touched on, as was the question about categorizing history as a social science. The speakers called for more discussion.

"History is not yet ready to be packaged for a national curriculum," Mr Arkell said.

Dr Bill Stubbs, education officer for the Inner London Education Authority, stressed that while difficult subject questions were being raised, he was "desperately worried" about how they would be resolved, given the timescale.

Orchestra director goes amid Sturm und Drang

by Judy Meewezzen

Now over the future of Stockport's widely-acclaimed youth orchestra has ended with the departure of its director, Mr Xenophon Kelsey.

The dispute has grown from a major disagreement between him and the borough's director of education, Mr Jim Hendy.

Mr Kelsey is opposed to the council's intention to impose a residential qualification on orchestra membership. At present, about half of the 280 members are drawn from other districts of Manchester and further afield.

He said: "The high standard of all these orchestras is quite naturally attracts excellent players from elsewhere. Stockport deserves the best we can get."

But Mr Hendy is determined to build up a musical tradition in Stockport which will specifically benefit the borough's pupils.

"At the moment, many young people in Stockport schools fear that membership of the orchestra is beyond their grasp."

"We believe that the present situation is very unfair, both to the pupils,

and to the ratepayers who support the endeavour. Xenophon Kelsey's musical clanship and his qualities as a conductor are not in dispute. We have been troubled by his inability to conform to normal council procedures, such as filling out forms for the payment of instrumental tutors."

Technically, Mr Kelsey has been employed as a consultant to the borough, receiving a monthly retainer and extra fees for concerts. Recently the council has sought to draw up a contract of employment dependent on the acceptance of a residential qualification.

Mr Kelsey, who can claim fierce loyalty among parents and the youngsters he has helped to train, refuses to accept the conditions and believes, with some bitterness, he has been the victim of a plot to remove him from office.

Meanwhile, within days of Mr Kelsey's departure, Mr Peter Harle, the borough's director of expressive art, has stepped in to conduct the orchestra.

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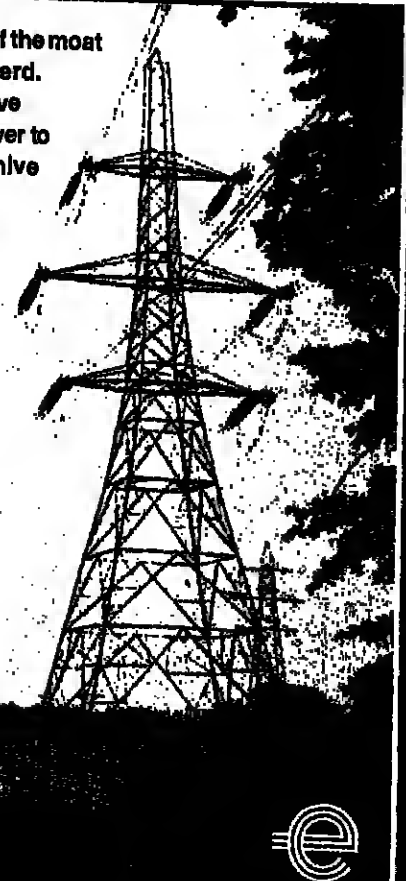
150 places are available and CSCS reserve the right to allocate places in the event of over subscription. For further details please write, with a stamped addressed envelope, to CSCS, Wentworth College, University of York, York, YO1 5DD, or telephone (0904) 414137, giving your name, job title and address.

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TES

SCHOOL TO WORK

What are the specific skills needed by tomorrow's workforce? No one yet knows, the MSC has been told

Too many job hopes pinned on IT training

The widely-held view that information technology skills are a key to employment in the future is examined scathingly in a major study sponsored by the Manpower Services Commission. Its conclusions have far-reaching policy implications for the education system and for youth training.

The study, carried out by a Sheffield University research team, was planned as the most extensive investigation yet into the links between education and employment in the information technology field. But its conclusions react beyond the boundaries of IT and cast doubt on the direction in which both schools and youth training have been moving under pressure from politicians.

Questioning 1,000 firms and a quarter of Britain's secondary schools, the researchers found that:

- Employers are virtually unanimous in placing little value on specific vocational skills taught at school. This applies particularly to IT, where they believe recruits can quickly pick up the required skills.
- The only specific shortage is in the supply of science and technology graduates and Higher National Diploma holders.
- Employers want school-leavers with a sound general education, and place a high value on academic achievement.
- They regard awareness of computers and familiarity with their use as a valuable background for recruits – both school-leavers and graduates – to non-technical disciplines.

The report calls into question the underlying assumptions of both Sir James Callaghan's Ruskin speech 10 years ago and of the 1981 White Paper which led to the establishment of the Youth Training Scheme. It points out that while both talked about relevant skills – in the one case to be taught by the schools and in the other in the YTS – neither defined them.

"The question is whether these skills exist, how they can be specified, and if so what they are," says the report.

It concludes that while industrial and commercial awareness, along with the closer links to employment, are valuable aims for education, an over-emphasis on the vocational in the curriculum and a desire to satisfy "the needs of industry" may in the long run be counter-productive.

It says: "The search for an indication of skills for the future is a fruitless and mistaken one. In a period of continuing technological change the emphasis is likely to be on general abilities rather than specific skills."



Sir James Callaghan: his assumptions are questioned

Level	Employers' Selection Criteria					
	Selected criteria	Specific skills	General skills	Personal appearance	Personal qualities	Personal potential
Graduate and above	A	8* (0%)	423 (24%)	50 (3%)	349 (20%)	87 (4%)
HND etc	B	8 (10%)	384 (26%)	103 (7%)	278 (18%)	35 (2%)
School-leaver at 18+	C	84 (3%)	402 (21%)	134 (7%)	420 (22%)	327 (17%)
School-leaver at 16+	D	118 (8%)	238 (12%)	249 (12%)	749 (37%)	313 (16%)
YTS trainee	E	8 (0%)	153 (11%)	268 (19%)	682 (42%)	82 (4%)
Weighted column totals		204	1,800	804	2,378	804

*Criterion weighted by number of recruits to which it applies. The percentage in brackets shows the relative importance of each criterion at a given level.

What the employers say ...

A "two-nations" structure for handling information technology, which is emerging in industry, is shaping employers' requirements, the report discloses.

The providers of the technology – the systems analysts and managers, and the programmers – are at the top. Below are the larger numbers of employees who use what they provide – who operate the word processors and access the databases.

Not long ago, programming was a job for white-kid school-leavers or adults with the right aptitudes, many of whom had been trained on Manpower Services Commission courses for the unemployed. But now firms insist that programmers and the others in the top group should be graduates or Higher National Diploma holders.

The researchers listed the criteria which employers apply in general recruitment:

- 1 Academic achievement: relevant degree, good general education, numeracy;
- 2 Personal potential: clear thinker, good intellect, willingness;
- 3 Personal qualities: ability to communicate, to mix with others, to work in a team, to get on with colleagues, correct attitude, motivation, enthusiasm, personality, breadth of interests;
- 4 Personal appearance: pleasant, smart;

5 General skills: relevant experience in certain areas: general clerical skills; 6 Specific skills: keyboard, word processing.

An indication of the relative importance that employers attach to each of these criteria is given by the table, which shows the frequency with which each was mentioned by the firms, weighted by the number of recruits to which it applies.

An analysis of employers' statements about the qualities they look for in IT staff shows similar criteria. Concern about shortages focused on the supply of suitably-trained graduates.

"At the higher level, the demand does not match supply. At the lower levels, training on the job will normally ensure that basic skills can be enhanced ...," was a typical assertion.

The message was that education should provide familiarity with and awareness of IT at all levels. But the only specific skill ever mentioned, say the researchers, was in the use of the keyboard.

A number of employers called for training in the use of computers as work tools to be part of the curriculum, to make familiarity with computers integral to long-term education possibly from primary on, and far less programming and more practical use of IT.

But others suggested that basic and fundamental skills and knowledge were

more important ... "Reinforce basic skills in English ... teach good knowledge in IT, computer and sociology."

In their view of education, many of the firms stressed the importance of fundamental and general learning providing basic skills. The need for specific IT skills, say the researchers, was seen as a low priority.

"I don't think IT is a big deal. Anybody with reasonable skills and attitudes will soon adjust."

"Our main needs will be for IT employees who are comfortable in their keyboard."

"I would much prefer the education system producing literate, resource people with adequate learning skills than pre-packed office fodder."

"We consider that the present education system is falling behind in teaching of mathematics. Any person who has been taught mathematics properly is quite capable of being trained to use the rather diverse types of computer used by small companies."

Skills for the future, by Mike Daniels, Paul Harrison, Mike Jones, Ben Jones, Julie Fletcher and Jerry Wellington, Education Division, Sheffield University, Arts Tower, Sheffield S10 2TN. £5.



Features new: members of the very young farmers' club at Kings Copse county primary school, Hedge End, Hampshire, are relishing the trials of sheep-raising. A nearby farm museum donated the sheep, and the school has now had to work out a rota of apprentice shepherds. Needless to say, there have been flocks of volunteers ...

First there was the Campaign for Real Ale, then the one for real bread. Now there is a campaign for real books, but at least one reading specialist believes it is having some undesirable side-effects. Report by Julia Hagadorn.

Genuine teaching – even when the books aren't 'real'

A reading expert has called for tolerance on the part of the "real book" campaigners, claiming that teachers are being made to feel guilty for still using reading schemes.

Mrs Betty Root, from the Reading and Language Information Centre at the University of Reading, has published a booklet in defence of reading schemes because she feels that too much pressure is being exerted to direct teachers along one particular path.

She says that those who write about using only real books reveal a certain arrogance in claiming that they know what constitutes a "real" book. And many of them, she says, have not been exposed to the "unremitting daily pressures exerted by a class of lively, mixed-ability children."

It is totally irresponsible, she says, to denigrate teaching techniques which

invariably have been found to achieve the required goals. Mrs Root argues that the use of a reading scheme does not preclude children from having access to a wealth of stories and information books. Moreover, well-designed schemes can help children in their first tentative efforts to read.

Explaining why she has decided to write the booklet, Mrs Root said that her centre was getting the backlash from teachers who had had the real books philosophy imposed on them by advisers. Their confidence was being undermined, she said, and they were not being credited with the ability to choose the method which worked best for them.

Asking children to learn to read using real books was fine if you had a number of highly competent, highly literate teachers who really knew their books, but, unfortunately, this was not the case.

A survey of 1,186 infant teachers carried out by her centre and as yet unpublished, showed that only 42 teachers, or 3.5 per cent, actually gave their pupils a completely open choice of books with no grading. Another 60 teachers used a single reading scheme but the vast majority (91.4 per cent) taught their children to read with a mixture of schemes and supplementary readers and books.

The survey, which covered a wide cross-section of British schools, also asked teachers what they read to their pupils, and how often. More than 95 per cent read to their class daily. Nearly 90 per cent read a variety of books but only 46 per cent read poetry regularly.

In Defence of Reading Schemes by Betty Root, 50p plus 20p postage from the Reading and Language Information Centre, University of Reading, London Road, Reading.

Conquering a need to stoop

Eight-year-old Tracey Jones' 99-year-old great-grandmother had difficulty picking up her keys whenever they fell on the floor.

So Tracey and her classmates Clare Griffiths and Luke Roberson from Llanfyllter primary school, Dyfed, decided to solve the problem.

After a week of work, they came up with a walking-stick which has since earned them a £250 innovation award.

The stick has a magnet fitted to its base so will attract any metal object – including keys.

And to ensure that it works just as well in the dark, the pupils have fitted a battery-powered bulb half way up with

a control switch beneath the stick's handle.

The school hopes that BP, one of the sponsors of the award, will develop the walking-stick and market it to the elderly.

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Disturbed children	12
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'Time for closure' Zebedee's school told

Youngsters in Strathclyde are campaigning to save the tiny school which inspired the TV series *The Magic Roundabout*.

The local council want to close the village school at Ardentinny and bus the 20 pupils five miles down the road.

But residents in the village of 160 think the idea is far from magic and the children have started a "save our school" campaign.

The school, with one classroom and one teacher, spawned the 1960s series after writer Eric Thompson settled in the village which nestles on the shores of Loch Long in Argyllshire.

Mr Thompson, who wrote, directed and narrated the English version of the *The Magic Roundabout*, based his characters – such as Zebedee and Florence – on pupils he found at the school.

The catch-phrase "It's time for bed!" always closed the four-and-a-half-minute series, which Mr Thompson adapted to the French-made programmes. Present pupils have been parading outside the offices of Strathclyde Regional Council.

Parents say it would cost only £20,000 to save the school – and are all the more angry because of the estimated £200 million that has been spent on Cullinport Trident nuclear missile base across the loch.

Solitary teacher Kathleen Robertson said: "It's a special school. It's more like a big happy family and it would be a crying shame if it had to close."

Visual reminder

A wall-chart headed "Is there a hearing-impaired child in your class?" has been sent to all chief education officers by the National Deaf Children's Society with a request that it be issued to every primary school.

Enquiries about the chart should be addressed to: Lynn Watling, Assistant Education Officer, National Deaf Children's Society, 45 Hereford Road, London W2 5AH.

PROFESSIONAL ASSOCIATION OF TEACHERS

- We said PAT is committed to advancing new discussions to provide effective arrangements for determining teachers' pay and conditions.
- We have seen the Secretary of State to promote discussions on this critical issue.
- We will continue to talk to the Secretary of State.
- We call upon all teachers' unions to reject strike action in favour of peaceful persuasion.
- We believe most teachers wish their profession to demonstrate a commitment to responsible debate rather than organised disruption.

PAT ACTS POSITIVELY TO PROMOTE PEACE

If you wish to join PAT, all you need do is write to the following address (no stamp required): Professional Association of Teachers, FREEPOST, Department EW, 99 Friar Gate, Derby DE1 9BR.

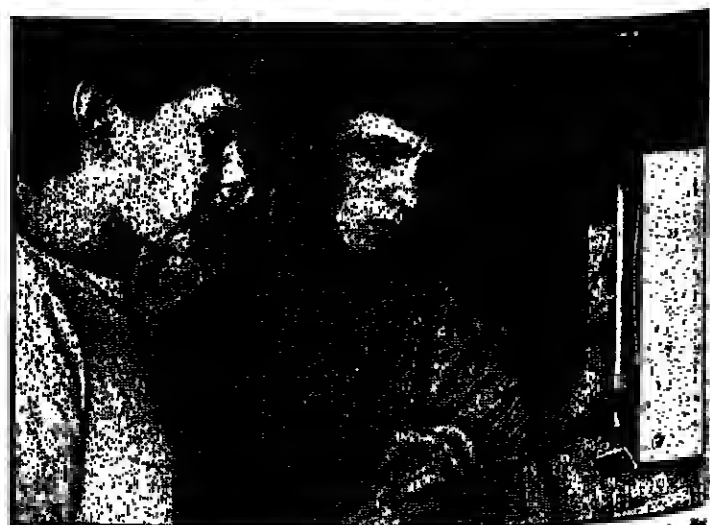
Shortage of science graduates still acute

The emphasis in schools should be on the use of information technology across the curriculum, the report advises. A narrow, skills-based approach to IT education will have little educational or vocational value, it warns.

"The overall context of employment is one of constant change and gradual updating. In such a context the best strategy for IT education is to provide basic, general, skills in the handling of information – rather than specific skills," say the researchers. They point out that such basic information skills have to be taught within the general framework of the traditional aims of education – literacy, numeracy, communication and personal development.

The team does not appear to place great importance on the development even though they found that the majority of schools see its introduction across the curriculum as their next stage of development. The researchers say that CAL may be one way of introducing the use of IT, but stress the broader aim of making pupils aware of and familiar with the technology.

The researchers point to the evidence which indicates that the number of employees engaged in using IT



The best strategy for IT education is to provide basic, general skills in the handling of information

in future will be extremely large while those involved in providing the technology will be small, and say that this has implications for education at every level.

They say that:

- A general awareness of IT, an ability to use it, and the opportunity to advance their own education through it, should be seen as a fundamental aim for all pupils.
- Greater use and awareness of information technology is all areas of the higher education curriculum would be both vocationally and educationally worthwhile.
- Expertise for a small number – graduates in science, technology and engineering – is a vital goal.

Graduates with an awareness of, and some experience of using, IT will be a valuable commodity to employers even if the graduates' backgrounds are not in the numerate disciplines, say the researchers, but they emphasize that,

In the short term at least, the shortages are of those from the science and technology disciplines.

"Output from higher education must be increased," they say. "It must be increased, not by an emphasis on a vocational curriculum at school level – which by encouraging early specialization might intensify the failure to give enough women into information technology in higher education."

The achievement of the strategy in the schools, they say, has already been impeded by gender bias as such factors as the dominance of computer studies, the lack of proper use of resources, and the

Edited by Mark Jackson

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SCHOOL TRAVEL SERVICE

TEACHERS' PAY

Geraldine Hackett examines whether an independent pay review body—advocated by some as a way out of the current dispute—would be of benefit to the profession

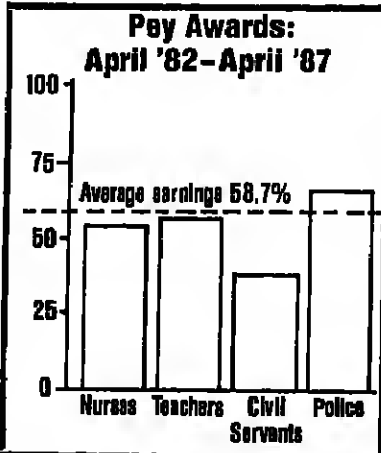
Is an independent pay review body for teachers a way out of the present conflict over the abolition of pay negotiating rights? The teachers' unions don't think so. They want a negotiating council where employers, Government and teachers discuss pay. But the Education Secretary appears unwilling to make concessions unless teachers relinquish the strike weapon. At present, pay review is confined to nurses, soldiers, doctors and dentists, judges and senior civil servants. All four review bodies have different histories, but the groups they cover either cannot be members of unions, such as the armed forces, or like the nurses would find it difficult to take industrial action without putting people's lives at risk.

What pay review does is remove direct Government control from the process of setting their pay. The Government appoints the review body from its list of the great and the good and the members use their independent judgement to make recommendations.

The Government can, and more often than not does, disregard the recommendations on the grounds that they are not in the national interest. In its report last year, the doctors' and dentists' review body deplored the fact that for the previous five years the Government had failed to implement its award in full. The review members made clear that they were not responsible for balancing the health service's finances, saying: "We must emphasize that our role is not to manage the NHS, or simply to distribute the cash increase that the Government has decided is appropriate for the NHS in a given year. It is to consider all the factors we believe are necessary to reward fairly the contributions doctors and dentists make to the NHS."

The Government's body make comparisons with similar civilian jobs. The other review bodies do not usually make such comparisons, but they do take into account what is happening to average pay, rises in earnings in other

Reviewing: the situation



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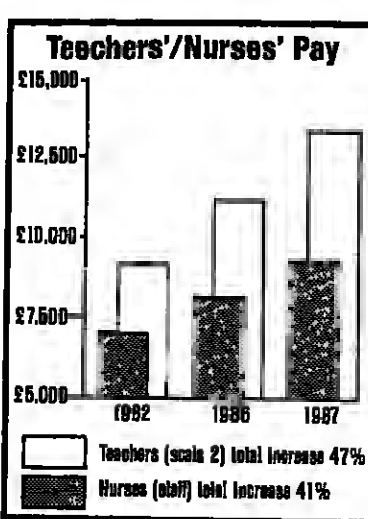
The Government this year headed off an impending battle with the nurses by paying their award in full, but it was only the second time in four years that the nurses have been given the full amount on time. Usually the awards are staged, reducing the money that nurses get in that year, but raising salary levels to the recommended rate by the end of the year.

Before reaching their decision the review bodies take evidence from "interested parties"—their professional organizations and unions that represent nurses and doctors and the Government department or the Treasury. The next stage varies according to the review body.

professions and earnings in the rest of the public sector. The final figure produced by the review body is not based on a formula that balances equivalent pay in other professions against the pay rises needed to recruit and retain staff. As one participant in the process put it: "It is not an exact science or a mechanistic formula. It is a judgement made by a group of people who do not have a direct interest in what should be paid."

Ms Valerie Cowie, director of industrial relations at the Royal College of Nursing, sees the task as putting a case that will convince reasonable people of the justice of your argument. As a system for setting pay, the RCN, the largest nurses' union, believes pay review has meant higher percentage rises for nurses than other groups of workers in the health service and in the rest of the public sector. Nurses' earnings, though, have not kept pace with the increase in earnings across the public and private sectors.

But whether all groups over which the Government holds some of the pay strings would do better out of the review is impossible to tell. A teacher stuck on the maximum of Scale 2 has seen his or her pay rise by 26.2 per cent between 1982 and 1986—from £8,700 to £10,986. A staff nurse was paid a



maximum of £6,095 in 1982 and her maximum pay had risen 27.2 per cent by 1986 to £7,750. Once the latest 16.4 per cent pay rise for teachers and the 9.5 per cent for nurses is added to the totals, teachers, who have been taking industrial action for two years, have done better than nurses in percentage terms, but that is partly due to the fact that their pay deal spans two years.

According to Chris Trinder, research officer at the National Institute of Economic and Social Research, it is not clear whether, in the long term, public sector workers do better from pay review or from collective bargaining. The Government, after all, can always impose a pay policy by setting pay factors in its public expenditure plan.

What is clear is that in recent years, pay review bodies have been giving larger percentage rises to the more experienced staff. The latest award for nurses, for example, means the pay of nursing auxiliaries and students will rise by between 4.9 and 7 per cent,

Testing questions

Sue Surkes examines the Education Secretary's plans for benchmark tests for children aged 7, 11 and 14

Testing times may indeed lie ahead if the Conservatives return to power and Mr Baker's battery of bench-marks are introduced into the nation's schools. Teacher unions have made their opposition to the idea of testing at the ages of 7, 11 and 14 abundantly clear. Educational administrators and researchers have questioned the wisdom and practicality of the proposal. And testing at local authority level has been going on for years.

Research carried out in 1983—the best year for which figures are available—showed that 71 per cent of I.E.A.s had some form of standardized testing. The growth in the number of tests put out by the publishing industry, which is itself a barometer of education trends, suggests considerable agreement that some testing is an essential aspect of teaching and school management.

Used to gauge both attainment (achievement in a particular subject) and ability (potential for learning or performance), most of the tests currently used are bought from publishers, administered in primary schools and given to every child, rather than to a sample. Reading and language skills and maths tests continue to be the most widely used. Verbal and non-verbal reasoning exercises are also employed, but are thought to be less popular, tarred as they are with the brush of the now less fashionable IQ test.

The purposes of these tests vary considerably, although they are not used to make poor performing pupils repeat a year and, as yet, do not seem to have been employed to root out bad teachers.

The London borough of Hillingdon has been testing all final-year primary children in maths and English since 1972 (the maths testing is done through coursework assessment alone). Revisited with the help of the National Foundation for Educational Research, the tests provide secondary schools with information about pupils' strengths and weaknesses.

The Inner London Education Authority, which also tests at 11, uses reading and maths tests to gauge the performance of individuals, and verbal reasoning, to ensure primary young-ster classes are sorted into genuine mixed-ability classes at secondary level.

Surveys of this kind suggest not only that the purpose of such testing is to put test results to good use.

But, as the report shows, all efforts appear to have been made by only one school in three per cent of the authorities suggest that registration can be improved by training (non-party political) canvassing, paying people for canvassing, or launching a national publicity scheme.

Another method is to ask schools, colleges, and the Youth Training Scheme to supply the register of officers with names and addresses of 17-year-olds. But this has had only moderate success, as in Shetland where 100 young people asked to register.

More than party political issues are at stake. It has been argued that young people feel a part of the political system, are less likely to be anti-social, and are more likely to be involved in the question of the right to vote.

The 1981 Office of Population Censuses and Surveys' figures for 1980, missing from the electoral register, double those recorded for 1980, suggesting a growing apathy.

All the statistics are based largely on old two-horse races and, while it would be dubious to suggest that a survey lobby can affect the result of a general election, there is no doubt that it can affect things in marginal constituencies.

Of course, it all depends upon what the political perspective is—but the coverage might well have raised the

question among the apolitical majority: are these right-wingers and moderates as they read their morning newspapers about the union's internal wranglings.

According to the press pundits, a "right royal battle" went on between the moderates on the union's executive and the militants in the conference hall throughout their recent conference. One newspaper even managed to get the law over the decision to suspend eight leading officers of the union's left-wing inner London branch as a strap between the "right-wingers" on the executive and the "left-wingers" who lead the 13,500-strong Inner London Teachers' Association.

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Used to gauge both attainment (achievement in a particular subject) and ability (potential for learning or performance), most of the tests currently used are bought from publishers, administered in primary schools and given to every child, rather than to a sample. Reading and language skills and maths tests continue to be the most widely used. Verbal and non-verbal reasoning exercises are also employed, but are thought to be less popular, tarred as they are with the brush of the now less fashionable IQ test.

The purposes of these tests vary considerably, although they are not used to make poor performing pupils repeat a year and, as yet, do not seem to have been employed to root out bad teachers.

The London borough of Hillingdon has been testing all final-year primary children in maths and English since 1972 (the maths testing is done through coursework assessment alone). Revisited with the help of the National Foundation for Educational Research, the tests provide secondary schools with information about pupils' strengths and weaknesses.

The Inner London Education Authority, which also tests at 11, uses reading and maths tests to gauge the performance of individuals, and verbal reasoning, to ensure primary young-ster classes are sorted into genuine mixed-ability classes at secondary level.

Surveys of this kind suggest not only that the purpose of such testing is to put test results to good use.

But, as the report shows, all efforts appear to have been made by only one school in three per cent of the authorities suggest that registration can be improved by training (non-party political) canvassing, paying people for canvassing, or launching a national publicity scheme.

Another method is to ask schools, colleges, and the Youth Training Scheme to supply the register of officers with names and addresses of 17-year-olds. But this has had only moderate success, as in Shetland where 100 young people asked to register.

More than party political issues are at stake. It has been argued that young people feel a part of the political system, are less likely to be anti-social, and are more likely to be involved in the question of the right to vote.

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NFER tests are administered in the last year of first school and the third year of middle level to identify and monitor under-achievers. The results are discussed by each school's staff with the educational psychologist so that remedial programmes can be devised if necessary. "It's pointless testing hordes of kids unless you do something about it," said Mr Neville Adams, an area educational psychologist.

The perceived necessity for more "objective" pointers to performance seems to be gaining ground in some areas. The ILEA is examining the possibility of reading and arithmetic tests at the ages of 7, 11 and 14 to help diagnose problems and to assess whether schools provide the same opportunities to learn basic skills.

The authority must often cited as a benchmark in this area is the London borough of Croydon, which has attempted tests in maths and reading at 7 and 11, non-verbal reasoning at 9 and educational ability scales in science reasoning, symbolic reasoning and clerical aptitude at 14. "Parents have two questions to ask which the education service has to answer," said Mr Donald Naismith, the authority's director of education. "How well is my child doing in relation to his or her ability? And how well is he or she doing in relation to his or her peers?"

As part of a move towards producing a profile for each child in all areas of the curriculum at these ages, the authority plans to introduce tests in other subjects and to link them closely with specified curriculum guidelines. The NFER has been engaged to develop what can be expected of different children at different stages of development in other main areas of the curriculum. "We are novices," Mr Naismith said. "We do not pretend we have any answers, but think we are working towards better questions."

Many teachers, however, seem less enthused. Mr Graham Cluer, secretary of the Croydon branch of the National Association of Schoolmasters/Union of Women Teachers, said his school had been obliged to drop useful tests to make way for others set by the authority.

"I know of a number of schools where no use is made of the results, where they are put in a drawer and forgotten about," he said. "I'm not aware of any that actually use the results of the tests."

It is difficult to say what Mr Baker or his successor will borrow from local models because so little is known about the kind of system he wants to introduce. But the fears are that his national system will differ from local systems in two fundamental ways—by allowing tests to shape the curriculum and teaching in the kind of restrictive

way that brought the 11-plus into disrepute, and by inflating the importance of test scores rather than treating them as snapshots.

Mr Baker has talked in terms of tying tests to a specified curriculum but has not decided whether the tests will be applied to every child. It is believed he will go for criterion-referenced tests, which focus on the individual, as opposed to norm-referenced tests, which compare a child's performance with that of others of the same age and are popular with the I.E.A.s. (In view of its attempts to introduce criterion-referencing at 16-plus, the DES would look rather silly if it opted for anything else.)

Beyond that, several questions are being asked. How, for example, will the Education Secretary approach the issue of test scores rather than treating them as snapshots. (Using NFER documents, for example) and allow I.E.A.s to devise their own tests? Or will he opt for something tighter and more prescriptive? How will he make sure that a range of hidden variables are taken into account? "You can't consider national testing unless you have national standards of provision," a spokesman for the National Union of Teachers warned.

What, more importantly, will the purpose of the testing be? The aims, experts point out, must be made crystal clear if a test is to be appropriately designed and the results useful. He has stressed that his attainment targets should not result in an "unduly narrow approach to teaching and learning" and has said "we do not want teachers to teach only what is testable". But if the raising of standards is

a primary aim, then he has not spelt out how and why standards should rise without a system which focuses teaching and learning on the test.

It is known that Mr Baker believes teachers and pupils perform better if the goals they are supposed to aim towards are made explicit. If this is the main purpose of his scheme, then it is a logical, although not necessary, step to tie a national curriculum to testing. If it is accountability to parents that matters most, one may well ask how he proposes to get over the sorts of problems that I.E.A.s have experienced in trying to explain the meaning of test scores to parents.

"Parents have to ask for their results because we've been agonising over how we can intelligently and reassuringly convey this very difficult information to them," Mr Naismith said. "Teachers are concerned that comparisons will be made which are misleading and hurtful."

The complexity of the tests will depend, of course, on what it is that Mr Baker wants to test. For there is a world of difference between asking what a pupil has done and what he or she can do. It might be enough for parents to know that their children have been exposed to Pythagoras' theorem or Animal Farm. It becomes more difficult when one asks what it is about the theorem that pupils ought to understand and which elements of this understanding youngsters of different abilities ought to be expected to grasp.

Mr Baker has said it will be necessary to determine "clear and challenging attainment targets in ability" and "allow for variations in ability" and to define the "essential content, skills and

Time and commotion studies

Educational virtue may have grown out of necessity at Bramcote Hills primary school, Beeston, Nottinghamshire, where parents will soon deliver their verdict on a shortened school day.

The Bramcote Hills parents may give a clue to what will happen in many other parts of the country as the National Association of Head Teachers has just asked all its branches to give urgent consideration to whether there should be a change in the school day.

Changing the timetable at the Beeston school was agreed by the head-teacher, Mrs Pat Farrington, the governors, staff and parents. They were anxious to restore the meals service after 18 months of sending children home at lunchtime.

Out went the 70-minute lunch-break for all 320 pupils; in came two staggered 45-minute lunch sessions, and the school day ended 40 minutes earlier than before.

"The children come home in the

THE TIMETABLE

James Meikle looks at the latest developments over changes to the school day

daylight in the winter. They are less tired and seem to be enjoying school as much as ever," says Mrs Lindsay Power, chairman of the governors.

Mrs Farrington said: "Before industrial action, I had sufficient teachers willing to help at lunch-times. They withdrew and I had no teachers at all. I felt it was not safe to have all those children without sufficient teachers about."

Mrs Farrington is a member of the NAHT, which has argued that a restructured school day can bring about a dramatic improvement in pupils' attitude to work, a decrease in vandalism and better discipline. Staff also have better opportunities for training and preparation of work.

The association believes that changes could offer greater job security for school meals staff and supervisory assistants since shortened lunch-breaks give fewer opportunities for pupils to go elsewhere for lunch.

In Avon, the county council started consultations on changing the school day only when heads complained about the difficulties of lunch-time supervision.

This has helped create suspicion both in Avon, where reaction has been mixed, and other authorities which have faced similar difficulties either in getting paid volunteers from the community or in persuading heads that non-teachers can control large numbers of boisterous children.

Such questioning of motive is not new. Oxfordshire parents gave chief education officer Mr Tim Brighouse a hard time four years ago when he tried to reassure them that reorganizing the day was not a cost-cutting exercise.

In the end, some comprehensive changed their timetables, although nowhere nearly as radically as some suggested alternatives.

None of the present experiments involve scrapping lunch. The NAHT says that "natural fears" from parents about pupils returning home early have proved largely unfounded as it is easier for pupils to be cared for after school than at the beginning of the day.

Hard statistical evidence of improved performance by pupils is still missing although Mr Ken Saxby, head of Tideway comprehensive school, Newhaven, an early convert to a changed school day, believes it has been a factor in better examination results.

Six years ago Tideway had a curiousity value. Now teachers and education managers are keen to learn from its experience. The school day, once a conventional 8.15am to 3.45pm, with 75 minutes at lunch, now involves registration at 8.10am, start of lessons at 8.25am, a 25-minute lunch-break, and an end to formal school at 2.15pm.

Staff and parents were consulted to organize their own lives—either within school-based activities after lessons or in the community—and vandalism in the town fell despite teenagers having more free time in the afternoon.

Failing to register

LOCAL FLUCTUATIONS

Ian Nash argues that the political parties—especially Labour—should be turning their attentions to making sure that young people vote

Before the losers in yesterday's local elections start moaning about political apathy, they should consider what they did to attract the thousands of young potential voters into the polling booth.

Roughly 2.5 million (6.7 per cent of eligible voters) were missing from the electoral register. More worrying, 23.9 per cent of 17-year-olds and 13.2 per cent of 18 and 19-year-olds are unregistered, disqualifying them from a vote in the general election.

It does not occur to thousands of parents that their children must be registered as early as 16 in order to qualify automatically for a vote at 18. Labour, on the face of things, should be most alarmed because all political and independent polls show a massive groundswell in its favour among 18 to 24-year-olds.

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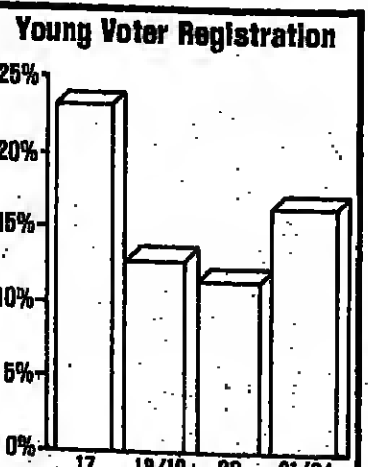
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THE UNIONS

Who controls the NUT? Richard Garner looks at the composition of the union's executive as the battle over negotiating rights resumes

Sensational analysis of the National Union of Teachers may be a little bemused as they read their morning newspapers about the union's internal wranglings.

According to the press pundits, a "right royal battle" went on between the moderates on the union's executive and the militants in the conference hall throughout their recent conference. One newspaper even managed to get the law over the decision to suspend eight leading officers of the union's left-wing inner London branch as a strap between the "right-wingers" on the executive and the "left-wingers" who lead the 13,500-strong Inner London Teachers' Association.

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The political complexion beneath the make-up

operating in other unions which act as a front for the Militant Tendency—can now bank on the support of about two-thirds of the executive.

It wants to keep open the door to talks on the national curriculum in order to try to influence Mr Kenneth Baker's plans for benchmark tests at 7, 11 and 14. It has not ruled out the possibility of devolving financial management to schools and is in favour of relentlessly pursuing the campaign against the removal of teachers' rights—but at the same pace as before.

It believes the union should adopt a forceful presence during the coming general election campaign—and produce a manifesto for education which may not be a million miles away from the Labour Party's election manifesto.

Many of the union's key figures are members, ex-presidents Mr Gordon

Conferences

Educational Conference Trust Presents a conference on MUSIC COMPOSITION in the GCSE

A comprehensive analysis of requirements and a guide to the preparation of pupils. Many aspects reviewed, and major speakers include Hamish Preston, Adviser for Music, Royal County of Berkshire, and HMV. Groups of pupils will be seen at work. Discussion opportunities and open forum and presentation of compositions.

SATURDAY, 10th OCTOBER 1987 at the new CITY OF LONDON SCHOOL 18.30am-4.30pm

Applications (limited number of places available) Name: Mr, Mrs, Miss Address: CAPITALS PLEASE

To: Educational Conference Trust Conference House, Hall Place Gardens, St Albans, Herts AL1 1SB

I wish to attend the Conference on 10th October organised by ECT and enclose conference fee of £25 (includes buffet lunch), payable to ECT.

Signed: Date:

Green, Mr Bob Richardson and Mr Don Winters, to name but a few.

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TES correspondents report on the nadirs and zeniths of vocational training schemes

Century-old 'dustbin' gets big spring-clean

French technical schools are celebrating their centenary this spring and opening their doors to the public in an attempt to improve their poor image. Parents are reluctant to let their children leave mainstream general education at 13 or later for one of several hallowed technical and vocational courses on offer.

Despite the long tradition of school-based technical education and job-training, and continued Government efforts to improve their standing, technical schools are still regarded as a last resort for the less able.

Under-achievers can no longer be ejected from ordinary lower secondary schools at the end of their second or fourth years and sent to vocational schools without parental consent. About 20 per cent of second-year and 30 per cent of fourth-year classes are switched to technical or vocational schools.

Parents can appeal against the school council's decision or ask for their child to repeat the year in the hope that marks will improve enough to enable a move up to the next class. More and more are doing so in an effort to avoid the dreaded *orientation* into technical education. Last year, approximately 15 per cent of second and fourth-year pupils stayed down, compared with 9 per cent in 1961.

Mme Niede Catala, the junior minister for technical training, regrets French technical education is "unloved and little known".

FRANCE

She said: "It's a valuable tool which prepares pupils for a huge diversity of professions from lower-secondary through to university level. Its originality lies in the deliberate combination throughout of general studies, technical education and practical applications."

The basis of the education system is a national, hierarchical network with plenty of problems but also some big successes to its credit. At the top of the pyramid are the elite *grandes écoles* which train top-ranking engineers. Underneath them are engineering schools and 66 highly successful technical universities - *institute universitaires de technologie*. Similar to polytechnics, these were created in 1966 to provide less highly specialized diplomas than the post-baccalaureate *Brevet de Technicien Supérieur*, a left-over from the old system, whose products continue to be snapped up by employers.

Technical education for school-leavers in the state sector alone is shared between 1,172 technical lycées, 1,350 vocational schools and 482 apprenticeship training centres. The brightest of the pupils who have been "oriented" into technical education begin preparing for a technical baccalaureate during the fifth year in secondary, at the age of 15 or older.

Holders find that highly-coveted



Face of change: adjusting to the world of work

places in the technical universities often go rather unfairly to candidates with a general, mathematical baccalaureate - who also monopolize entrance to the *grandes écoles*. Some then enroll in ordinary universities where they do less well than their contemporaries who have remained in general education.

But they are luckier than the under-achievers who are "oriented" out of general education into "short-cycle" technical education and sent to a vocational school - *lycée professionnel* - at the end of the second or fourth year in secondary, when they are 13 or 15, or older.

These schools - often called "educational dustbins" - can be a second chance for some. But, all too often, lack of availability means pupils cannot choose their speciality and end up in office skills when they wanted catering or hairdressing.

Courses are being revised, but many are still obsolete like most of the machine tools, and teachers are out of touch with industry. Neither the *Certificat d'aptitudes professionnelles* (roughly equivalent to City and Guilds), nor the slightly more advanced *Brevet d'Etudes Professionnelles* lead to jobs any more.

A few vocational schools are now offering a brand-new professional baccalaureate, closely geared to industry's

needs, but the standard will be high. It will be out of the reach of most of the 15 per cent of each age group who are judged unfit even for vocational education and sent to apprenticeship centres which are right at the bottom of a technical education pyramid.

Present Government policy would enable free upward movement at levels for those who can progress, more so-called "footbridges" or special classes back into general education. There is a definite move away from early specialization towards general education.

Mary Follett

More student places pledged

MALAYSIA

Pupils from Malaysian technical and vocational schools will be given greater opportunities to pursue higher education courses this year, according to Hajj Bujang Ullis, the deputy education minister.

He said the Education Ministry had decided to implement a new scheme that would make technical and vocational students eligible for diploma and degree courses in the country's universities.

Until now, students who had obtained the *Sijil Pelajaran Nasional Malaysia* - the Malaysian certificate of vocational education - have had very limited opportunities for furthering their studies. Only a small number were allowed entry to diploma courses, and then solely polytechnics.

Parents have been reluctant to send their children to technical and vocational schools, because of the lack of opportunities for progression to higher studies and the increasing level of unemployment among students.

Given that Malaysia's higher education system is capable of accommodating less than half of the school-leavers annually eligible for higher education, there is much speculation on how the educationists on how the extra campus places are to be made available, and whether the Ministry will be able to keep its promise.

In recent years, it made similar pledges when encouraging parents to put their children on combined arts and science courses in the secondary schools, only to turn its back on the complaints of bitter parents and

teachers who found the universities not want students with combined school-leaving certificates.

Proposals for creating an Open University are again under Government review, but the indications are that it will be some time before a decision is made. Such an institution has been under consideration for years now, and the Government has been strongly criticized for dragging its feet on the issue, and for its repeated refusal to sanction the setting up of private universities at a time when unemployment among the 12-22 age group is at record levels.

There are currently around 15,000 students attending Malaysia's vocational schools and 6,000 at its technical institutions.

Geoffrey Parkin

Cashing in on false hopes

JAPAN

Some Japanese private vocational schools are apparently playing hard to attract students.

According to the Government Agency, some special training centres are making false advertising claims, suggesting they can train out of qualified nurses, cabin crew for foreign airlines or quantity surveyors.

Special training schools, a category created in 1976 to improve vocational instruction opportunities, now total an estimated 3,000, with the number of enrolled students nearly 600,000.

The schools have become particularly popular in recent years, and are attended primarily by women. The Solomon Mahlungu Freedom College (SOMAFCO), named after a Soviet student executed in 1979, has been operating in Tanzania since last year - initially as a secondary school for students exiled after Soviet's 1976 invasion, but now incorporating vocational education.

Dr Mohammed Tikly, director of the college, was on economics and history teacher in the Inner London Education Authority and from 1979 to 1982, co-ordinator of Haringey's multi-cultural education support unit. He said: "The role of education in liberated South Africa will be to create a new kind of South African - a non-racial democrat dedicated to social justice. We need to instill new values and new attitudes so that we can build a new South Africa."

The Bantu education system - one of the grievances sparking the Soweto rising - is dismissed as "education for subservience". Mr Tikly points in particular to the lack of maths, science and English instruction, and history courses designed to prove the validity of apartheid.

Instruction at SOMAFCO is in English. "When liberation comes, we will need a common language as a uniting factor," Mr Tikly says. Afrikaans, peculiarly identified with apartheid and with little international usefulness, is clearly a non-runner. Introducing African languages into the secondary curriculum is planned.

Crime rate surprises Party

CUBA

Pat Smith on schemes for disaffected youth

A sharp rise in juvenile delinquency and classroom discipline problems has alarmed the Cuban Communist authorities.

Petty crime involving minors has increased in recent years, particularly with the influx of consumer goods in the so-called "dollar" shops to which the average Cuban citizen has little or no access except through the black market.

Police, education and government officials, community and women's organizations recently joined forces to head off growing disaffection among young people.

Their work through the newly-formed prevention and social welfare commissions is directed at identifying potential delinquents in schools - those pupils with conduct problems - and talking with their families.

Preliminary projects have also included trying to reincorporate youths who have dropped out of school and to encourage pupils with bad records to use their free time more constructively by giving them greater access to sports and cultural centres.

The Communist Party in Havana has conducted its own block by block survey of adolescents to detect those who are neither attending school nor working and who may be potential young offenders.

The issue of socially-unacceptable behaviour among young people nurtured on the revolutionary ideals and values of Communist Cuba has aroused debate as to whether school or family is responsible.

Many young offenders come from broken homes, but there is also surprising evidence that many youths in jail today are the children of people with good revolutionary records.

Sra Vilma Espin, National Commission chair and politburo member, asked at a recent meeting at parents who were Communist Party militants or good workers, but were not looking after their children properly.

Under the new system for detecting problem children in schools, if the parents fail, for example, to make sure their child attends school, and on time, their workplace will be informed in the last instance.

Sra Zelia Benitez, Havana Provincial Education Director, admitted that 80 per cent of the problems among young people are related to school.

The state is reviewing resources for reform schools and re-education centres. Sra Espin has urged the Education Ministry to consider sending the best teachers to work in these schools.



Voice for democracy: University students march through the streets of Peking earlier this year.

New freedoms may not quell demonstrations

CHINA

Geoffrey Parker on a lenient response to student protests

Students should have a bigger role in the management of their universities, says the man described by official Peking sources as China's most influential thinker on education.

Mr He Dongchang, Vice-Minister of the State Education Commission, said that while university presidents and teaching staff should remain largely responsible for administrative and academic decisions, a bigger say for students in "democratically managing campus life" would, in the long run, help universities to improve their work and students to improve their abilities.

His advice to universities has been prompted by student demonstrations earlier this year. Mr He stressed that the present climate should not be feared, and that universities should not fear repercussions for saying what they think, provided their opinions, "including criticisms of Party and government work" are expressed in a normal way. There would be no victimizing of those who have said something wrong, he said.

In bringing students and educators closer together, it was necessary to open up "democratic avenues" to allow students to air their views and swap their opinions "without misgivings". Therefore, students should be encouraged to concern themselves with state affairs, and to engage in a continuing dialogue among themselves and with teachers and other professionals, Mr He said.

Pursuing a high degree of democracy, he said, had to involve a gradual process "inscribed" by people's educational level and political experience. But the process had to be orderly.

Mohammed Tikly talks to Huw Richards about non-racial education

Laying the ground for liberation

Creating a new education system to replace one rooted in apartheid will be a priority for any new rulers of South Africa who might displace the present regime.

And while the African National Congress continues to give primary to political and military struggle, it is also constructing an institution that will serve as a blueprint for a new non-racial education system.

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Merit system rubs away at morale

UNITED STATES

Bill Norris looks at how teachers are adjusting to assessment

Teachers are having second thoughts about a pay deal that seemed good at the time. For agreeing to a long-term system of payment by merit, teachers in Fairfax County, Virginia, were awarded across-the-board pay rises of 12.1 per cent this year, and 8.8 per cent in 1988 and 1989.

But that was in the past. For the present the evaluation of teachers has begun, and not everyone is getting good marks. Realization has dawned that automatic pay rises based on seniority will soon be a thing of the past, and some teachers may even lose their jobs.

Suddenly, payment by merit does not look so attractive. Teachers have complained that the evaluation methods are unfair, and their morale is said to be plummeting.

Similar problems have arisen in Charlotte, North Carolina, where a teacher evaluation programme is already in place. Charlotte is a non-union town, and beginning teachers who used to get tenure after three years now receive between four and six years of intensive training and evaluation before qualifying for job security and a \$2,000 (£1,200) rise.

The classroom evaluations, as many as 16 a year, cover time management, pupil behaviour management, lesson presentation, instructional monitoring and feedback to pupils. Teachers are graded on a six-point scale, and even those who qualify for merit rises often find the explicit judgements devastating.

In some respects, the North Carolina scheme is easier on the teachers than

that proposed in Fairfax. For veterans, the evaluation is voluntary, with no suggestion of punishment for ineffective teaching.

Nevertheless, they too are complaining about damaged morale and loss of self-esteem, and most think the system should be discarded. In a recent poll, only 10 per cent said they liked it.

Like it or not, teacher evaluation in the United States seems to be here to stay. It formed a major recommendation of the highly-regarded Carnegie Forum Report, which last year proposed major changes in the management of American schools. This week two states - California and Connecticut - announced that they were close to a pact that would allow them to share funds and staff to create new teacher assessment in 25 subject areas by 1990.

The move is being seen as an important step towards a national certification board which would licence teachers and set professional standards. Both Connecticut and California are expected to make use of the research on teacher assessment now being carried out at Stanford University, paid for with an \$800,000 grant from the Carnegie Foundation, and more states are being asked to join in the consortium.



Explicit judgements are often found devastating.

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LETTERS

Mixed reactions

Sir - Recent articles and correspondence have drawn attention to the influence medical schools have on the science curriculum. In particular, I H Stevens (TES, April 17) suggests that either a neutral or "a positive response" has been given by medical schools to dual-certified examinations in science at 16-plus. This observation is at best misleading and simplistic, and at worst downright inaccurate.

Establishing the credibility of dual-certification is not, of course, a new concern for the many schools that have pioneered such courses at O level and CSE. At Stantonbury Campus, where dual-certification for all has been established for some years, we have carefully documented the replies of the various medical schools to candidates with these qualifications. Reactions have varied widely, but the responses to the inquiries that we made to all the medical schools in 1986 show that Ian Nash's fears (TES, April 3) are, in most cases, more than justified.

In general, applicants to medical schools are required to study three A levels, one of which must be chemistry. For those studying the three sciences, perhaps the most common combination for aspiring medical students, 16-plus qualifications are not of great significance. However, where another combination is chosen - for example, physics, chemistry and mathematics - most medical schools insist upon biology at O level and are not prepared to accept the appropriate dual-certified equivalent as a substitute.

A similar pattern exists at A level studies exclude physics. So much for the less specialized education post-16 or for the opportunities available to those young people who develop an interest in medicine when already embarked upon their A level courses.

The attitudes of the medical schools, and we should recognize the efforts of the more enlightened minority, must surely be of grave concern, not least to the DES. How is it possible - and is it acceptable - for the demands of the medical schools to vary so widely? If there are differences in degree courses, then the responsibility lies with higher education, not schools.

What is the relationship of pre-16 education to post-16 study? Where a biology syllabus may be both taught, and now assessed, as many as four years before entry to higher education, it really is a nonsense to claim any relevance to undergraduate studies.

Finally, is the wider issue of science-for-all. Is it reasonable for the school curriculum to be dictated by the perceived needs of a tiny minority of students?

JOHN WILKINS
Co-director
Stantonbury Campus
Milton Keynes, Buckinghamshire

CREST quest

Sir - I was pleased to note the prominence given to a news item on CREST awards in Surrey (TES, April 17). I wish, however, to clarify a number of points.

First, it is important to note that the CREST award scheme, developed and piloted by the Surrey Science and Technology Regional Organization (SATRO), with support from the British Association for the Advancement of Science (BA) and the Standing Conference on Schools' Science and Technology, is available throughout the UK as a national SATRO activity. Second, CREST awards are available for work within technology, computing, and electronics as well as science. Moreover, CREST project

work has already proved to be an important stimulus for breaking down traditional subject boundaries and encouraging cross-curricular application of knowledge and skills.

Third, CREST dovetails with the existing British Association Awards for Young Investigators to provide a continuous assessment ladder for project-based, process-led activity, from 8 to 18-plus.

This latter point was fully appreciated by groups of teachers attending the recent Scottish regional meeting of the Association for Science Education, who identified the potential bridging value of CREST for young people entering secondary education. For them, CREST would like primary science and technology to work in SI, S2.

Work for a CREST award may be

undertaken by young people of wide-ranging ability. The scheme aims to encourage a high level of participation in the application of science and technology, particularly at the start of secondary education.

I echo the remarks made by Mr Goodfellow concerning the importance of this type of experience as one means of encouraging longer-term involvement of the pupils with the worlds of science, technology and industry. It is encouraging that schools in Scotland, Wales, Northern Ireland and England are currently engaged in CREST activity.

ALAN P WEST
CREST national co-ordinator
Fortress House
23 Seville Road
London W1



Electronics: Included in scheme

Thought-shapers choose to forget memory training

YOU HAVE A LOUSY MEMORY JONES, THOUGHT OF JOINING HIS?



Sir - Paul Johnson's question: "Why do we now deprive our young of this harmless and useful skill (memory)?" has been formalized by the OCSE where "skills" and "process" learning are to replace "product".

Sir Keith Joseph stressed this but he alone is not to blame. In more than 20 years' continuous teaching experience I have met one supercilious HMI, many advisers and headteachers who have all looked pityingly at me when I have said that skills-based work is a waste of time if the pupils' brains don't have any facts or knowledge to crunch up and digest.

Paul Johnson has rightly diagnosed one of the great weaknesses of child-centred learning in which teachers are expected to draw on the pupil's experience when in many cases all they have is television and the occasional family holiday. I would go as far as to say many of the educational opinion-makers have gone out of their way to discredit a process by which many of them must have been taught in the 1940s and 1950s.

RICHARD WATSON
152 Windy Hill Lane
Marble-by-the-Sea
Cleveland

Derisory offer

Sir - There would seem to be a vindictive element in the derisory and penny-pinching offer made by the employers on the Southbury Committee to educational psychologists.

For about 12 years, the tacit link established between the salaries of teachers and those former teachers who moved into advisory and psychological service work were regularly confirmed.

Since almost all those concerned were trained graduates with teaching experience, it made total sense to establish a common "spine" of salaries.

Most of the changes in education which are introduced either locally or nationally have repercussions for advisors and psychologists and it is absurd to suggest that an imposed list of contractual duties, most of which good teachers would probably have accepted without query in better times, is adequate reason to offer a new and apparently quite arbitrary set of lower salaries which are not backdated and which are to apply, it seems, for more than 12 months.

With the current emphasis on quality in education, it is ironic that the only group of individuals being recruited who are required to have good honours degrees, teacher training and experience and post-graduate qualifications should be treated in this way.

After 12 years, how odd that the employers should suddenly decide that psychologists with their already very limited career structure do not even deserve that element of the Baker package that represents "allpance" in the salaries paid to teachers, advisors and psychologists over that period.

The increased responsibilities flowing from the 1981 Education Act, for example, are ignored and the effects on morale apparently discounted.

It would seem that the bitterness engendered by the protracted dispute over teachers' pay and conditions is now to be generated in another section of the education service.

B R PERRETT
Mere Lodge
Great Barton
Suffolk

Changing courses

Sir - Tim Brighouse (TES, April 24) has once again hit the nail on the head. The Government's attitude to education is a mass (fumes) of contradictions. Giving more power to heads and governors was one theme running through the 1986 Education Act yet, despite heads' protests, local education authorities were given the power to instruct a school to take back a suspended pupil.

A clause to allow an appeal was inserted only after vigorous representations. So much for more power to heads and governors.

The Act is no sooner passed than we

Support talk

Sir - I was disappointed to read that Victoria Neumark (TES, April 13) thought that an element of the Samaritans' recently launched educational package Time to Talk was "appalling".

The Samaritans exist to try to help people for whom life has become too much to bear. We do this in the way by offering space and time and emotional support to those in distress. We believe that this is fundamentally important in developing a relationship of trust and confidence on which we can build the foundations of ability to learn, to terms with and overcome the difficulties.

We can offer a dimension of care that other organizations may simply not have the time to give. However, do, at the same time, understand and recognize the need for the more practical support that may be available elsewhere. We certainly do not take the view that we have a monopoly on caring.

It is not at all unusual for us to let those who get in touch with us become aware of and understand the range of options that may be available to them in solving their problems; but we are not, and never have been, a clearing house simply to pass people on to other organizations. This applies as much to children as it does to adults.

As far as the video itself is concerned, it is encouraging to see that Neumark recognizes that the film is deliberately designed to raise questions at the end of each scene for prompt discussion in class where they will be properly supervised. I think it a great pity that Ms Neumark was "appalled" by the fact that it offers a wave a magic wand but can offer a place to come and talk, and believe that when put into the context of the full pack and its objectives, this seems anything but appalling.

SIMON ARMSON
Assistant general secretary
The Samaritans
17 Uxbridge Road
Slough

LETTERS

Society offers little to special needs school-leaver

Sir - Stan Segal expresses many of the apprehensions felt by those of us teaching the most profoundly handicapped children in our society ("Down with slogans", TES, April 24).

As many of those pupils who formed the traditional special school population take their rightful place in mainstream schools, many of our schools for children with severe learning difficulties are experiencing a significant change in the nature of their pupils. Medical advances have ensured that far more children whose handicaps are multiple and complex, and who require adult intervention for even their most basic needs, are forming a greater proportion of the special school population. Many of these children are now approaching school-leaving age in a society ill-prepared to meet their needs.

First, we should ensure that social services throughout the country honour their obligations to school-leavers who have complex and profound handicaps by improving facilities for continued learning within the adult training centres. Many ATCs are sadly lacking in such provision.

Second, we must urge the Government to implement the seemingly forgotten 1986 Disabled Persons Act which would make significant inroads towards a better future for this section of our population.

As ever, Professor Segal indicates a need for fundamental reform within our society to meet the basic human rights of handicapped people. While we may differ in our opinions as to how this may be achieved, we are surely in agreement that we still have some distance to travel to ensure that the most vulnerable members of our community take their place in an open society.

RICHARD ROSE
Headteacher
Wren Spluney School
Westover Road
Kettering
Northants

Professor Segal rightly indicates a need for change in post-school provision, and an extension of education to meet the post-school needs of these profoundly handicapped young people. The attention which he gives to the nonsense of school-leaving age may well be at the hub of any debate which will follow. Such reforms will inevitably take time, but I would suggest that two immediate concerns should be confronted without delay.

First, we should ensure that social services throughout the country honour their obligations to school-leavers who have complex and profound handicaps by improving facilities for continued learning within the adult training centres. Many ATCs are sadly lacking in such provision.

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RICHARD ROSE
Headteacher
Wren Spluney School
Westover Road
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Northants

It proceeds throughout the individual's school-life with the shortage of therapeutic ancillary services to re-emerge full-blown in the 16 to 19-year-old period. Finding placements then for young people - many of whom are severely handicapped because of the nature of autism - is extremely difficult.

Parents may then find no local "suitable" service and have to entrust their child to a privately-run establishment many miles from home - and this despite all the community care initiatives and a lengthy period in which social workers are apparently "scouring the universe" for the right place.

Then we are expected to let the individual leave precipitately because there is such pressure for places and the new placement wants the money - so no chance for preparation.

My contacts with the local Mencap group and the community health council suggest that such problems are not confined to one school or one special-needs group but that, in general, plans for those who have such needs are hived on universal ideologies or monetary expedients, neither of which reflect the practical issues of their predicament.

The concomitant of Professor Segal's wish for a multi-professional guidance system is that services have to be able to cope with individual needs and desires which may change over time, as opposed to individuals being prescheduled into fitting either what is available or the prescribed solution of the latest slogan.

BARRY HOLLAND
103 Sussex Road
Southport, Merseyside

Forced to fit

Sir - I write to express the strongest support for the ideas and observations of Stanley Segal.

Day after day at work in a residential school for autistic and non-communicating children, I meet the problem of finding appropriate placements and support for our children.

This starts early on with psychologists, and parents doing a tour of consultants, special schools and units before a compromise local placement is found.

It proceeds throughout the individual's school-life with the shortage of therapeutic ancillary services to re-emerge full-blown in the 16 to 19-year-old period. Finding placements then for young people - many of whom are severely handicapped because of the nature of autism - is extremely difficult.

Parents may then find no local "suitable" service and have to entrust their child to a privately-run establishment many miles from home - and this despite all the community care initiatives and a lengthy period in which social workers are apparently "scouring the universe" for the right place.

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BARRY HOLLAND
103 Sussex Road
Southport, Merseyside

Paid in kine

Sir - Your article, "Replacing the Butler" (TES, April 24) indicates that Butler's Act is to replace Butler's, following Sir Keith Joseph's attempts to reform education. The last time Butler, Butler and Joseph interacted (Genesis 40), the Butler was destined to oblivion, the Butler was readily re-instated, and Joseph, who prophesied it all, was to go on to become the leader's right-hand man. If history repeats itself, I hope for teachers' sakes it is all followed by seven years of plenty.

DAVID CHALMERS
Headteacher
Slade Green junior school
666 Piccadilly Road
Belvedere, Kent

First impression

Sir - As I read the article by Phil Taylor (TES, March 27) rife with teachers who encourage conventional standards of dress, I had a very strong sense of déjà vu. After a few moments I realized that I had passionately believed this when I was at university in the late sixties. I checked the end of the article for the "Phil Taylor (aged 18)". But no, it said "Deputy head".

It took me some years, in my intellectual arrogance, before I realized what I had overlooked: whether we like it or not, people are deeply influenced by first impressions.

Phil Taylor can hope that eventually he and his pupils will come to be valued for their intrinsic worth, rather than merely for their appearance. But the people that they will want to impress are very busy, and have learned to make rough preliminary judgements.

The correct spelling on the application form, the neat entries, the beautifully prepared report for the managing director, the confident delivery, the expected clothes, the clean shoes, all help to get us over the vital first hurdle. They help us to be taken seriously.

PHILIP THONEMANN
16 Shakespear Road
London NW7

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Mind gains

Sir - Rarely have I read such an illuminating article as Paul Johnson's lament upon the neglect of memory training. I must thank him heartily for it. I would like to show my appreciation by offering him three pieces of what I regard as exceptional wisdom which he can file away for future reference:

"A strong memory is commonly coupled with infirm judgement" (Montaigne).

"Nothing is more common than a fool with a strong memory" (C. C. Colton).

"A great memory does not make a mind, any more than a dictionary is a piece of literature" (John Henry Newman).

DAVID THOMPSON
98c Ramsom's Avenue
Cambsurrow
Milton Keynes

GRIST concern

Sir - I share the concerns expressed by Professor Miller in his article "From Wainwright to GRIST" (TES, April 24).

I was tutor to one of the first of the new genre of one-term courses in special educational needs in the ordinary school offered by West Midlands College of Higher Education in association with eight I.E.A.s.

A teacher-fellow I was party to the close collaboration which existed between the I.E.A.s and the providing institution.

Without such co-operation, the

teaching course would not have been possible.

Under the direction of Colin Smith of the University of Birmingham, I am currently undertaking an evaluation of a number of these courses and all my findings to date indicate that they are giving "value for money" to all concerned.

They are playing a vital role in the overall pattern of provision on INSET within many I.E.A.s.

However, they are not, nor were they ever intended to be, a substitute for a one-year full-time course of study but they do provide a comprehensive, taught programme which equips teachers

there is a reflective time for the development of school-focused projects.

A special needs one-term course has run every term at West Midlands College of Higher Education since September, 1983.

It is ironic that the establishment of GRIST funding has meant that for the first time since its introduction, there is no course running this term.

MARY NEWTON
Head
Learning Support Service
Limes Road
Hilton School, West Midlands

Weak readers

Sir - Mary Beck's Talkback article about reading failure ("All the help they can get", TES, April 24) begins as follows:

"Whatever your standpoint may be on dyslexia, it cannot be denied that many children share the same difficulties when learning to read. These include:

- difficulty in differentiating between letters such as b/d, w/i;
- difficulty in following a line of type across the page;
- difficulty in sequencing letters to make a word;
- difficulty in hearing the component sounds of a word, in ascribing a sound to a letter and in sequencing sounds."

The rest of her article goes on to discuss ways of overcoming these "difficulties". I have no doubt that, if indeed these difficulties did prevent children from reading, her suggestions would be very useful.

But what Mary Beck has done here is neatly to encapsulate the fundamental misunderstanding upon which much of the teaching of reading is based, particularly in the field of special needs.

For the "difficulties" she lists are

one - who can tell me with any certainty how many or what component sounds there are in "thing", "cheese" or "light", three common words I selected more or less at random.

So even if the most comprehensive programmes are devised to help children do these things, they will still not be helped with their reading. These are not their difficulties, and so it is unnecessary to devise programmes to overcome them.

I have not the space to go into it all here, but what makes people able to read is their ability to draw consciously and subconsciously on a range of information and experience that they already have about language and meaning and apply it to the actual print before them.

If learning readers, or any readers, cannot do this, then this is their difficulty, and this is what prevents them being able to read. The point alone could never be enough for them, however sophisticated were the techniques devised to help them process it.

The mistake that is repeatedly made in remedial teaching is to devise elaborate programmes for assumed but irrelevant deficiencies, instead of investigating the status and validity of the deficiencies themselves, and then going on to find the real ones.

JEFF HYNDSE
Senior course tutor
CNAA Diploma in the Teaching of Reading and Writing
Avery Hill Campus
Hemel Hempstead
Buckley Road
London SE9

Maths bench-mark

Sir - Mr Baker has called for national bench-marks in the primary phase. The Centre for Educational Studies, Kings College, London, is already working on a project, funded by the Department of Education and Science. This is called "Attainment targets and assessment in the primary phase: mathematics".

YVONNE LAMB
40 Linden Avenue
Thornton Heath
Surrey

Three-form cost

Sir - Bedfordshire councillors keep telling us that small, three-form entry high schools cannot provide a satisfactory exam curriculum at a reasonable price. I would be most grateful to receive a curriculum analysis from any TES reader who teaches in a 3FE high school.

BRENDAN MORAN
25 Woburn Court
Vincent Road
Luton
Bedfordshire

Words at work

Sir - The three organizations we represent are working on a project which looks at the use of formal methods of communication in the workplace. This will link research undertaken by the School Curriculum Development Committee's National Writing Project with a teaching resource on professional and business English being developed by The Building Societies Association in conjunction with the Associated Examining Board.

We would be interested to hear from teachers and lecturers who have had experience of working with local employers on schemes which look at the written word within the workplace. One outcome might be to use these as case studies in the proposed teaching resource.

If you would like to make your views and experiences known, please contact Sue Patchton at The Building Societies Association, 3 Savile Row, London, W1X 1AF, by May 15.

JOHN LEES
Assistant Development Officer
The Associated Examining Board
SUSAN PATCHTON
Educational Liaison Officer
The Building Societies Association
EVE BEARNE
Project Officer
The SCDC National Writing Project

Parting company

Sir - I read with considerable interest the article on the "Troubled state of the unions" (TES, April 10). I am one of the 20,000 lost members of the NUT. After a great deal of reading, listening and soul-searching I felt that the question now arises of which other organization I should join. I really can't see any reason why I should join any of them. I am told of possible problems, the need for legal advice, insurance and so on. If I feel that I cannot wholly support any of the organizations, should I really join one which offers the best fringe benefits?

MARY CABLE
24 Azov House
Harrow Road
London E1

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TEACHING MICROELECTRONICS
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TALKBACK

TEACHING PRACTICE

An equal partnership

Lis Ripplin et al

The article by Sally MacDonald (Talkback, TES, March 20) has prompted us (four students, two tutors and a primary headteacher fellow) to express our concern at the present system of teaching practice. It is a system which involves three parties, tutor, teacher and student, but possibly satisfies none of them.

A new focus is needed. Each teaching practice could be built on the foundation of an equal partnership between the college, school and student with clearly understood roles for all participants. Schools should be considered as training institutions with an equal voice alongside college and students. After all, schools are where the teaching expertise is and it is time to stop pretending that supervising tutors are an itinerant breed of super-teachers. Their expertise lies in their equally valid directions.

The most important relationship is the one between the classroom teacher and the student. The focus should give central place to this relationship, which, we agree with Sally MacDonald, should be a symbiotic one (rather than master/apprentice) where both parties can learn from each other. Students have enthusiasm and new ideas to give to schools, if they are encouraged; just as teachers have experience to offer them if they are encouraged.

It may be that schools regularly involved in the TP partnership will want to identify "teacher-tutors" among their staff, but we would hope that virtually all teachers would be involved. The role of the college tutor would be to support and enhance the classroom-based focus. Many other professional groups have similar arrangements.

Assessment of the teaching practice should be carried out by the three parties together, openly, without confidential reports or secret appraisals. An agreed view of the TP would be jointly written and signed by all parties, with opportunities for dissenting opinions to be recorded.

Perhaps with this new partnership teaching practice will be seen as a real learning experience for all: college, school, students and pupils; particularly for the fortunate generation of children working with teachers better prepared by a more open and worthwhile kind of classroom practice.

If having read this you are saying "we already do that..." ask around and see if other members of the partnership agree.

The authors, Lis Ripplin, Sue Ford, Lorna Harrison, Bill Ivory, Roger Kite, Liz Brown and Chris Bramigan, are all in the faculty of education, City of Birmingham Polytechnic.

The publication of the science-for-all curriculum development document is a reminder that science teaching can be a matter of interest to all: even those who are not scientists or science teachers. Debate about the teaching of science is healthy: no doubt there is much to question and criticize and some teachers have new and fresh approaches to recommend.

However, what are we to make of statements such as "single-subject sciences should be abolished" and "We need a national edict - no more single subjects"? These were remarks attributed to Sue Duncan, head of science at a Durham comprehensive school and a leader of a research project for the Secondary Science Curriculum Review (TES, April 3).

Perhaps this is the rhetoric characteristic of all curriculum innovators, but the appeal to government to stamp out all single-subject science teaching in our schools does seem to show a high degree of intolerance to those who hold other views. Nor is it consistent with the objections many teachers have to a centrally-imposed curriculum.

Mr Jeff Kirkham, director of the SSCR, is also described as having "no room for sceptics - elitist or otherwise". Yet we have not learnt, after several decades of curriculum innovations that have failed to fulfil the hopes and aspirations of their originators, to look with caution at suggested changes in practice?

And is not some element of scepticism, of questioning proposals and propositions, part of the scientific attitude?

The slogan "science for all" is perhaps one to be so questioned. That all children should learn some science and should learn not only about the findings of the sciences but also about their methods of inquiry, we all agree upon.

This we can accept that science is for all. Yet can we all agree that every pupil should be taught the sciences in the same way, and to the same level of content and difficulty?

Teachers know that the differences in the abilities and interests of their pupils and students must be taken into account in deciding what is taught to whom. Therefore, while science is for all, not all elements of the sciences, irrespective of their difficulty and intrinsic interest to pupils, can be taught to all.

Is it always better to teach combined science than to teach the sciences separately? This does seem to be the

SCIENCE

All for one and one for all?

Beverley Shaw

claim of the SSCR. Therefore, it follows that single-subject teaching must be abolished.

But what is combined science? An example is given of a science department looking "at a subject such as water biologically as a requirement for life, chemically as a solvent, and in physics as an electrical conductor."

Here, the single subjects of biology, chemistry and physics are not abolished: they are brought to bear in combination on the subject of water. The topic approach may make a lot of sense, but is scarcely revolutionary, nor is it abolishing single-subjects or those that teach them, for their separate teaching is brought to bear on a single subject.

Such team teaching may help to avoid "excessive repetition", one of the alleged ills of single-subject science teaching. Excessive repetition is, by definition, a bad thing and ought to be eliminated. But, whether repetition, in such, is always harmful is another matter. Perhaps it is one way of making connections between the sciences, and an aid to the memory?

Separate-subject science teaching is said to be traditional and elitist. It is also popular with parents, and some universities, in particular their medical schools, approve of it. This is enough to condemn such teaching for some. But is all that is traditional necessarily

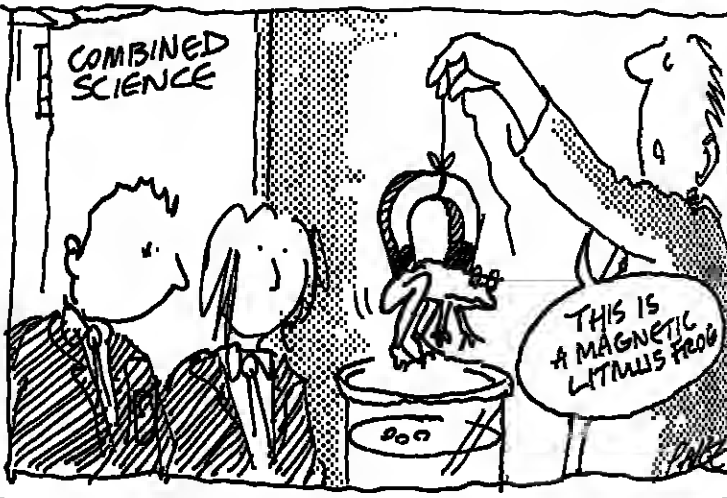
bad? Or is it rather that the word "tradition" is now simply a term of condemnation?

Is it wrong that some should get a specialist education and training, essentially elitist in character? If so, let us close down our medical schools right now. Does parental approval of any aspect of our schooling automatically show it to be worthwhile? Most teachers are parents too, and some may find themselves approving teaching for their own children. They are prepared to deny to others.

There is a case for teaching sciences separately, at least to some pupils at a certain stage of their development. This is because such sciences are genuinely separate. This is clearly recognized by the universities where students study for degrees combining separate sciences, but these sciences are generally taught in separate departments.

There is also much to be said for combined science, that is teaching the sciences in a topic-based way. The danger is when the value of this useful pedagogic approach becomes exaggerated and is thought to be a panacea for science teaching.

Beverley Shaw is lecturer in education at the University of Durham.



SEGREGATING THE DISTURBED

No easy option

Mercia Newsome

I was dismayed to read the article "Time to stop taking the easy option" (TES, April 10) by Peter Gray and Jim Noakes discussing whether or not to segregate disturbed children from mainstream education. The authors omitted to present any viable alternative within an ordinary school setting, apart from mentioning the need for commitment to planning. They also implied that special schooling necessarily involve avoidance of the main issues underlying the child's problems and a low standard of education.

There is no doubt that some children do benefit from a period of removal from home and school. Education authorities could learn much from the model provided by a community home with education run by a social services department.

A CHE is able to offer a service to a very disturbed child of a kind that cannot be provided in a more traditional school. A child invariably arrives with a history of educational failure: based on uncontrollable behaviour in the classroom, suspension, records of low achievement and ESN in conjunction with a host of damaging experiences which led to referral in the first place.

Mainstream teachers are primarily educators and have little time to pursue pastoral care effectively. A CHE is able to offer an environment in which back-up is provided by residential social workers. The integration of teachers in the whole life of the establishment allows for an approach where education and care can be seen as a single process. Children designated "inaducable" in their

child's problems instead of alleviating them. Education offered within a special setting must work towards the same goals as the national system, if it is not to produce second-rate citizens. In my own establishment this does occur and results comparable with mainstream education are obtained.

Success is based on three factors. First, a positive approach within the classroom, focusing on praise of acceptable behaviour rather than on punishment of misdeeds. Second, high expectations, motivating children to achieve. Third, respect for each child as a person, encouraging participation in the planning and appraisal of individual education programmes, making choices, and exercising a measure of control over his or her future.

These three are essential for the encouragement of self-esteem and the development of self-confidence but they are rarely present in mainstream education.

The article suggested that it is important that any plan for children with educational and behavioural difficulties "brings about changes within the institution where those difficulties occur". The structure and philosophy of a special institution should enable it to develop to develop skills to cope with those difficulties inherent in the environment from which they are removed. It is unlikely that alterations can be effected within the environment.

The point and purpose of education is to lead towards success - the special school can develop methods and processes which make such success possible for a particular group of children. Mainstream schools at present have neither the resources appropriate for such a task, nor the will to tackle it.

Mercia Newsome is deputy principal and head of education at a community home for disturbed children in Ottershaw, Surrey.

FEATURES

On the ball

Huw Richards reports on the YTS cup stars and those who never make the kick-off



Tony Adams: YTS, Arsenal and England

Mitchell Thomas: will play for Spurs at Wembley

with a package of skills and qualifications to make them attractive to potential employers outside football.

So the Society has come up with a day-release package: first-year students take a City and Guilds leisure industries qualification in communications skills and computing, plus certificates from the Central Council for Physical Recreation for sports leaders and the Royal Life Saving Society and a first aid course. Work based at their club includes physiotherapy and the Football Association's YTS coaching certificate.

In the second year they continue to more advanced standard. In both years they also have a half-day release for employment in their club, in the local leisure industry or in catering if their club is in a tourist area such as Blackpool or Torquay.

Courses are arranged by modules - providing scope for those who can't reach the highest standards in courses to pick up at least some

qualifications. A small proportion of academically talented trainees are diverted into A levels or Business and Technician Education Council courses rather than the standard package.

"Lads with six, seven or eight O levels are a small but slowly growing minority. We've had one trainee whose headmaster said he was a potential Oxbridge candidate", says Micky Burns - who hopes this trend will be encouraged by the greater training opportunities now offered to young players.

Most clubs, many of whom treated the scheme with initial suspicion, now co-operate happily: 91 League clubs (only Watford persist with a separate scheme) and about half-a-dozen non-league clubs, now take part.

Persuading trainees is another matter, according to Micky Burns. "Getting a 16-year-old who wants to play football to go back into the semi-academic atmosphere of a college of further

education isn't easy. The point we make to them is that this is an insurance policy, something you can put away in a drawer, but which will help if your career in the game doesn't go to plan."

He readily admits that they are a difficult group to teach: "They aren't as a rule that highly motivated. Lecturers need to establish a rapport, and to be flexible. These are physically fit, active people and they don't respond to being confined behind desks and talked at."

But results, with an academically unselected intake, are well up to national averages. How well trainees released by clubs after their two years do is hard to assess: "They aren't easy to trace. Those that have problems can still come here for help but not many do," says Micky Burns.

Negotiations with the colleges are handled centrally from Manchester. As a former teacher, he is as much at home talking to FE lecturers and education officers as he is with players and managers.

Micky Burns sees YTS as a long-term project: "It'll be succeeding when the senior players at clubs are ex-YTS trainees who can tell new lads that they did the training and it didn't stop them getting on in their careers."

It also fits well into the training framework with the adult vocational courses run by the society for mid-career players: "It can't replace those courses, because updating will always be necessary, but it will provide a much better base for further training."

Finding a second career is a traditional footballer's nightmare - and while Mitchell Thomas and Tony Adams may not need their "insurance policy" yet, they'll eventually need to look for employment outside the game.

The society provides 500 grants a year for training courses: "We'll assist in any form of vocational training - pub management, HGV license, catering trades, journalism or anything else leading to another career," says Micky Burns. They can't catch every one of the 2,500 registered professionals or prevent the hard luck stories of former England stars such as Kevin Bente or Tony Currie who have fallen on hard times, but they try to minimize them.

A third strand has been added to their activities with the creation of a community programme based on six north-west clubs, organizing sporting and leisure activities using club facilities. Sixty jobs have been created, and the extension to another eight club-based schemes from September should create another 80.

Micky Burns points to this as a way of bringing clubs closer to their communities, making better use of their otherwise under-utilized facilities. He also emphasizes that clubs benefit from this increased social awareness and involvement.

"The chairman of Preston North End reckons that half of the increase in attendances this season can be put down to the community programme," he says with natural pleasure and pride at the achievements of his organization in co-operation with his home-town club.

Here to stay

Why are mobiles so static? asks P M Lacy

As every teacher knows, any decision concerning schools is taken purely for educational reasons. No clearer evidence of this fact can be found than in the accommodation itself, especially if it is newly provided. There is no doubting that we have beautiful buildings with very well-equipped rooms, the envy of many a visitor, and a great deal of educational thinking went into the plans.

Of course mistakes, with the best of educational intentions, were made. One can feel sympathy for the architect who, confusing the art of levitation with that of the Venetian, designed the store for paints and paper a good 13 feet above floor level with no means of access. *Noli me tangere*.

Further along, a spacious stairway leads down from the first floor to the only side of school which allows no re-entry (except by the same stairs). Then, on the other side of the block, 350 pupils battling to get out of double doors through which a smaller number is antaring hourly put to the test Darwin's theory of the survival of the fittest.

With mobile classrooms, however, there are no such anomalies and that is no doubt why 14 schools were given, instead of the proposed foundation block, 16 old mobiles, 14 of which seem here to stay. Clearly, the authority considers the mobile to be of educational value.

Colleagues who, having successfully led the school to a new era in organization, have now been replaced by mobile classrooms, have been compensated with mobile classrooms.

discuss the weather in foreign languages than with pupils who have left the cosiness of the main buildings and the security of the covered way to set out across the open space beyond the bike sheds through snow and ice, driving rain and winds direct from Siberia?

Even the room itself reacts to the weather. It shudders in wind, dips when it rains and overheats in sunshine. Its own heating devices are fickle: one has only to watch emerging pupils to know the temperature within, by faces the colours of litmus paper.

Its gas cylinders cannot be relied on either. Last year a maths class learned the meaning of probability when, against all apparent odds, one blew its top, in a noisy hiss of escaping gas.

There often develops an affinity between mobile and teacher, to such an extent that in his or her absence, the mobile rejects cover staff - who, in turn, face a period in enemy territory with some trepidation. They do not appreciate the idiosyncrasies of the heater, the electric point, the door handle, the window fasteners, the curled-up edges of the flooring. And that's if they can gain entry.

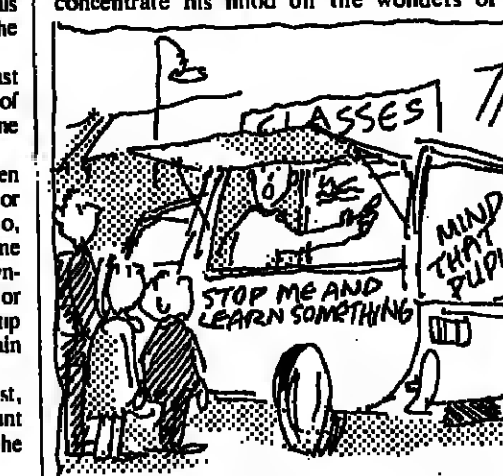
Of all the joys afforded by mobiles the greatest, as far as pupils are concerned, is the game of hunt the key for the locked room. The rules of the game are as follows:

- 1 It must be pouring with rain.
- 2 The usual teacher must be absent and have the key with him.
- 3 The cover teacher must send a pupil to find the caretaker.
- 4 The caretaker must be having his break.
- 5 The only possible key in his possession must not fit.
- 6 Another room must be found.
- 7 Repeat from line 2.

The game is won when the bell goes before the teacher has the key to his own room.

Maybe the main advantage of the mobile is that teacher and pupils never suffer direct interruption. What visitor, be it parent, inspector or governor, is eager to brave the elements and trudge out to a mobile, or indeed is made aware of its existence?

With a third of the pupils secreted away beyond the bike shed, the rest of the school functions very well in its specialist rooms where the visitor can concentrate his mind on the wonders of the



overhead projector, the video and practical sessions of craft, science and music. Only a true connoisseur could assess the value of the mobile.

We call it a mobile. In reality it is immobile. It has planted its feet squarely on our soil, defying the harmony of the new buildings and the landscaped gardens. Its future is assured, its presence inevitable. *Et in Arcadia ego*. For purely educational reasons, of course.

P M Lacy is vice-principal of a community college in Cheshire.

John Coyle

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FEATURES

As record numbers turn to private schooling Zaida Reynolds talks to hard-up parents determined to make the necessary sacrifices and Nikki Foster (bottom of page) explains why her faith in the maintained system has been shaken.

When Araba Williams decided to send her son to private school, she realized that as a single parent she would have to make sacrifices.

For a start, it meant that she would have to postpone buying her own home. At present, she lives in a two-bedroom council flat in Ladbroke, south London. The door at the communal entrance to the block has been smashed by vandals, and not for the first time.

It isn't snobbery that makes Araba want to see the entrance repaired, just a natural desire to see things done properly. It is this same desire that has motivated her to send her six-year-old son to an independent school.

She feels that by starting Kwaku in the private sector, it will double his academic chances later on. She hopes he'll qualify for a place at Dulwich College, because she admires what she's heard about it.

Kwaku is the youngest pupil at the Strentham modern school, which takes youngsters from 7 to 17 in the lower and upper schools. His mother is impressed by the ethos of the school; she likes the small classes, the discipline and the priority given to uniform and homework.

She denies that pressure is being put on him to become bookish at a young age, but insists that he does an hour's homework every day. "He's getting himself into the habit of doing work after school, and even looks forward to it. Afterwards, he can watch television - he's still a kid after all," she says.

The important thing for her is that Kwaku is being taught to discipline himself into taking his learning seriously. There's no extra need for her to push him, she claimed, adding that she'd be hard-pressed to find a similar attitude among children in local maintained schools.

She has been influenced by the private education she received as a child in Ghana. Her grandmother worked hard to pay for her schooling, and now Araba is determined to do the same for Kwaku. His enthusiasm and "self-discipline" after just two terms at the school, has convinced her that she's made the right decision.

To pay the £300-a-term fees she's already cut back on the level of socializing she does, and doesn't spend as much on clothes as she used to. Araba is a secretary but has taken an extra job housekeeping for a friend one day a week to help pay the fees. She wouldn't take on any more work because it would reduce the amount of time she can spend with her son.

She says: "Every parent has high hopes for their children. If you think that paying for their education is going to help them achieve more, then it doesn't become a sacrifice at all. It's for everyone to choose for themselves."

"What did you do today?"
"I cleaned out the paint pots."
"What did you do today?"
"We tidied out the stationery cupboard."

What on earth is going on? She's seven-years-old, two years into school and quietly, subtly, turning off.

I make an appointment to see the headmaster. All the facts that I have are based on my daughter's comments. Articulate, trustworthy as she is, I must allow for hyperbole. I cannot assume that her perceptions are entirely accurate but what else is there to go on? How can I find out exactly how her day is spent?

The headmaster tells me what a lot he has to do. Stress, homework; he can barely cope. I nod, listen and reel out an hour later, knowing only how he spends his day.

A group of concerned parents submit a request to the board of governors. Could we have a regular evening allotted to discussion - what subjects are covered, how they are taught, how can parents help and support?

Silence. The parent-governors are unable to explain what happened at the meeting but suggest I contact the chairman of the governors. I begin to panic. The school is closing in on itself. It seems to be imploding with all the significant personnel in it. It's like trying to find out about diabetes - we know they're in there but what's the condition like they're in?

Paying the price



She says the teachers' industrial action did not really influence her, unlike Judy Bellor, another single mother, who feels that her young son shouldn't be exposed to a situation in which "children become piggies in the middle and ultimately lose out in their learning".

Nevertheless, she says she has sympathy for the teachers. "The sad thing is that there aren't any provisions to help the children catch up once the industrial action is over," she says.

Judy's son, Antoine, attends the 130-place Thomas Moore school in Eltham, which is quite a trek by public transport from their home in Plumstead, south-east London. Last winter Judy's car broke down and for a time she had to get him to and from school by bus. He also has private tuition at home and does an hour's homework each evening.

His mother believes that children in indepen-

dent schools stand a far better chance than those in maintained schools because they are preferred by employers. Maintained schools are losing parents' respect because of their "lack of discipline", she claims.

"Having been through the system myself, I know enough not to have any faith in the quality of the education," she says. Judy maintains that she was "dumped" in CSE classes and had to rebel in order to sit O levels which her teachers denied she was capable of.

She's now determined not to "handicap" her son's prospects, and is convinced that paying for education is a sure way of guaranteeing him a foot in the door when it comes to higher education and jobs.

During Antoine's brief stay at a local authority-run nursery, Judy clashed with staff who disapproved of her encouraging her son to read and

write.

"They told me it wasn't fair on the other children because he was way ahead. He had been writing and spelling since the age of three, and suddenly to stop him? Their attitude was completely missed each other, and I feel he would have faced similar attitudes later on in the state schools," she says.

Birmingham teacher Shirley Hsie is another single parent who has opted for private schooling. What for her began as a purely practical solution when she couldn't find a nursery place, has become an alternative to the system that she herself is part of.

Shirley has three children and pays £300 a term to send her youngest daughter, Jennifer, to a private school in Walsley, Sutton Coldfield. She also pays for "extras" like swimming, ballet and elocution.

She fixed me with a paralyzing glare. "Males and females are treated differently throughout their life, Mrs Foster. They won't do the same things when they grow up, so they might as well get used to it now." I went home and cried.

The education officer listens politely. He talks about trying times for schools. I continue to plough on through the tangle of this conversation. Defeated, I begin to give up.

"Are you a teacher, Mrs Foster?"

"Yes, but not primary. It's irrelevant."

"Ah, but I'm sure you will be able to make up for what you feel your daughter is missing at school."

The phone goes down and I dwell on that unctuous remark. Is this a new policy?



FEATURES



"One solution may be to encourage children to read to each other"

Little read books

Clare Farquhar looks into the finding that infants spend only two per cent of the school day on any kind of reading

In the recent research in which my colleagues and I watched more than 90 top infants for a day to 35 inner London schools (see *The TES*, April 3) I was surprised to find that, overall, children spend only about 2 per cent of the school day (or roughly eight minutes) in any kind of reading. That included reading to the teacher, reading alone or to each other, playing reading games, using computer reading programs, and so on. Wondering whether these results were typical I repeated the study with 60 children in 10 other inner London Education Authority classes, this time watching them for several days. The results were almost identical.

This raises a number of questions. Does it matter if children aren't spending their time in reading? If children are able to read well by the end of the top infants, then maybe the answer is no. Unfortunately, for many of these children, this was not the case.

At the end of the top infant year our original sample and their peers had an average reading score on a group reading test of five points below average. A quarter of them had scores more than 15 points below that point. On this evidence, many of these children were in great need of help with reading.

So could infant schoolchildren spend more time in reading? That is two raises questions about educational priorities and about classroom organization. If more time is going to be devoted to reading, then where can this time be found? Would an increase in reading imply cutting back on other important curriculum areas?

The children we observed spent less than a third of the day working in the classroom on the so-called "3Rs". They spent similar amounts of time in writing, spoken language activities (such as "story time"), and maths - that is, roughly 10 per cent of the day in creative or constructional activities (painting, modelling, and so on), and very little time (1 per cent of the day) in free play activities such as sand and water play.

Most of the rest of their classroom time was taken up by organizational or administrative matters - that is, more than a sixth of the day in lining up, tidying up, toilet visits, answering the register, giving in dinner money, and so on. They also spent about 2 per cent of the day (about the same amount of time as they devoted to reading) "wandering" in the classroom - that is, not focused or involved in any particular activity. More than a quarter of the school day was spent in outside play times and dinner time.

From these results, it is tempting to suggest that more time could be redirected towards reading without much cost to other areas of the curriculum. But how can schools maximize the amount of time spent in reading activities? Could we divert any of the time spent "wandering" or in break times, into learning time, and in particular, into reading time?

Organizing reading time in the classroom is not easy. Particularly if teachers want to hear individual readers, in our study, there were many

classes where, on the day we observed, none of our target children read to the teacher at all. In fact, reading to an adult accounted for less than a quarter of all the reading time we observed. This is perhaps not surprising.

Perhaps more surprising was the fact that so little time was devoted to other reading activities. Although we found that children spent more time reading alone to themselves, or simply flipping through books, than they did reading to teachers, we hardly saw any reading activities such as reading games, or paired reading. These amounted to less than a fifth of all reading time, and involved less than a quarter of all the children observed. Not a single child was using a computer for developing reading skills.

Of course, the amount of reading that we recorded did vary from class to class. There were some classes where none of our children engaged in any reading at all during the day, and others (just over half the classes) where all our children did at least some reading. The biggest proportion of the day spent in reading in any class was just under 7 per cent, or an average of 27 minutes for each child observed in that class.

What can we learn from the classes that were doing more reading? I looked at the four "best" classes. Interestingly, we didn't observe any children reading to their teacher in these classes. The reason that these classes were spending more time in reading did not appear to be because the class teachers were better organized at listening to children read.

On the other hand, nearly all the children observed in these classes not only read to themselves and flipped through books on their own, but they also engaged in some other kind of reading activity without the teacher during the day. In nearly every case, this involved reading to or with other children, usually in a small group.

I wouldn't want to make too much of results based on a small number of children in four classes. However, it does seem to me that there are two types of reading activity in the classroom, those which require the direct involvement of the class teacher (such as listening to children read), and those which do not. From our observations, more could be done in many classes to promote the latter.

Children need encouragement to read without a teacher alongside them. From our interviews

with the children themselves, we know that only about half of them actually liked reading alone. They got stuck if they didn't know the words, and some found it a lonely activity.

One solution to this (supported by our four "best" classes) may lie in encouraging children to read to each other, an activity which not only gives them an opportunity to help each other over unknown words, but also turns reading into a shared, rather than a solitary, experience.

Thought could also be given to ways of encouraging children to play reading games, particularly at transition or "chooslog" times, when they are most likely to wander.

It may be unrealistic to expect that we could direct all of children's "wandering" time into reading (though if we did, we would double the amount of classroom reading). However, any move in this direction would be positive.

At the same time, we do not want to sacrifice quality of reading experiences for a simple increase in quantity. Appropriate reading materials are important, as is the question of which children should work together, and how.

What about teachers listening to children read? Given the limited time at their disposal, teachers need to think carefully about the use they make of this time. Throughout our study, we saw very few teachers working with groups of children on reading - either playing reading games, or reading simple, short reading books together.

I am not suggesting that teachers should stop listening to individual children read. But I am suggesting that, in addition, there may be ways that teachers and children could read together in groups, and that this might help teachers to give direct help to more children during the course of a day. It might also help children to develop different reading habits - that is, group reading habits - which might then carry over to situations where a teacher is not present.

Finally, what of the large amount of time that children spend out of the classroom in non-learning activities - particularly break times? Obviously, I am not going to suggest that teachers should carry on teaching during their dinner hour. Indeed, the fact that some teachers find themselves compelled to do exactly that, in order to be able to listen to individual readers, is indicative of just how serious the problem of finding time for reading has become.

However, we do know from our interviews with the children that for some of them, playtimes are an upsetting or distressing time of the day. We also know that infant schools are increasingly keen to involve parents in their children's education, and in particular in reading. Given these two facts, it seems to me that one way that parents and teachers could work together might be in devising small group reading activities that parents could offer children at break times, as an alternative to spending time in the playground.

Clare Farquhar is a research officer at The Thomas Coram Research Unit.

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Review

Bradbury in Bloomsbury

Ronald Hayman on literary London

Na, Not Bloomsbury. By Malcolm Bradbury. Andre Deutsch £17.95. 0 233 98013 X. Cuts. By Malcolm Bradbury. Hutchinson £6.95. 0 09 168280 11.

Malcolm Bradbury takes the title for his collection of essays from *Lucky Jim*, and, comparing Kingsley Amis with Evelyn Waugh, makes the point that the British prefer their writers not to be intellectuals. While great French and German novelists turn out serious critical and philosophical work along with their fiction, we prefer "the writer of minor meditations, the writer who is party to the commonplace and ordinary stuff of life, the realist, the observer, the humorist". He is allowed to be spiky and aggressive, but he must make up for it by being affable and clubbable. Moral criticism must be suspended in social comedy.

Waugh canonized his intellectual acuity, allowing his strong sense of history to fatten into a studied Catholic mysticism for less degenerate periods, while Amis soon put his academic career behind him, together with his promising poetry and his asstringent literary criticism, cultivating instead a Vaughn-like public peevishness, which could be taken for eccentricity. Though Bradbury makes his points carefully and cogently, he skirts around two important but uncomfortable questions: were Waugh and Amis careerist strategists who knew that they'd have been less popular if they'd allowed their formidable intelligence to infiltrate their fiction? (John Mortimer is another popular writer with more intelligence than he allows to appear in his books.) And what is it about the British cultural climate that encourages this falsifying modesty?

Occasionally, thanks partly to the Puritan tradition, we produce a critic who battles for higher standards of intelligence and maturity. In the essay "A Matter for Serious Scrutiny", Bradbury acknowledges: "Of all the intellectual influences on my early life, F. R. Leavis was unquestionably the strongest. My convictions about the fundamental importance of the literary imagination, my sense of the artist as the essential critic of public life and personal experience, come very much from him..." The young Kingsley Amis was also influenced by Leavis, whose hostility to the Bloomsbury ethos infected many of those who arrived at intellectual maturity during the fifties. But Bradbury, unlike Waugh, Leavis and Amis, became passionately interested



in cultural developments on the other side of the Channel. He is now one of our finest cartographers of modernism and post-modernism. The five useful essays reprinted at the beginning of this collection preserve a canny equilibrium between generalization and specific criticism.

But expertise in contemporary theories of fiction is not conducive to storytelling. In *The Novel Today*, the symposium Bradbury edited in 1977, B. S. Johnson wasn't alone in insisting on the need to reject stories, since stories are "lies". The first words in Bradbury's 1983 novel *Rates of Exchange* are "This is a book, and what it says is not true". His unmistakable partiality to storytelling - autobiographical anecdotes are admitted to his critical essays - is only one of his difficulties as a post-modernist novelist. Temperamentally he is in sympathy with the humanist values that underpinned the great tradition of the English novel. No less than E. M. Forster or Angus Wilson, he is a literary descendant of Jane Austen, and in the best of his fictions, *The History Man*, a life-denying tendency to abstraction is pitted against a life-affirming respect for the solidity of the self and the otherness of other people. Though the plot is solidly carpentered, it never looks old-fashioned, partly because his characters - university teachers - are self-conscious about

fiction. Even the attractively empirical Miss Callendar knows that she must "listen to all stories with a certain healthy scepticism", while the meanly opportunistic Howard Kirk plots his career as if the past had no reality. Using totalitarian methods to accelerate the social revolution inside the university, he is convinced that he is on the side of history.

One critic, Claire Tomalin, has suggested that by fomenting hatred for the sociology-teaching radicals, the novel "may have helped Mrs Thatcher to win the 1979 election". This is unfair. By pointing accurately to what was going on - and not only in the universities - Bradbury was living up to his ideal of the artist as the essential critic of public life. In genuine pain at having to watch the steamroller of radical conformism pulverize the precious remains of Victorian liberalism, he protested eloquently and entertainingly. *Rates of Exchange*, which followed eight years later, was almost equally entertaining and important as an interpretation of contemporary history. Believing that life consists largely of onking exchanges in different ways - sexual exchanges, political exchanges, financial exchanges - he structured the narrative around the word "exchange"; trying, through narrative, to analyse what we're exchanging when we have dealings with other

people. His midio play, *Congress*, which was spin-off from the novel, performed the same trick with the title word, exploring its sexual and non-sexual meanings. Set in central European cities, both novel and play showed how one attempts to exchange information could be comically wrong when foreigners thought they could speak English. The title of his new novel, *Cuts*, points to yet another use of wordplay on structural principle. Far from approving of Mr Thatcher, he tilts against the cuts her Government was imposing during the summer of 1984. But this time, as he attempts a broad look featuring an eccentric television peer and a Gielgudlike actor-knight, we can't help making detrimental comparisons with the way Evelyn Waugh would have handled similar material.

The story is about a Midlands television company - not Granada but Eldorado - which abruptly commissions an unknown writer and extramural lecturer, Henry Babbacombe, to write a 13-part series. Eventually, of course, the series is cut. That the story was prompted by personal experience is confirmed by the essay "Adapting and Being Adaptable: The Novelist as Television". Bradbury had been commissioned to adapt *Rates of Exchange* as a five-part series "only to have it cancelled for financial reasons after rehearsals and just before the first day of principal photography". Though he'd already had several experiences of television, he has now ceased to marvel at the contrast between writer's solitude and the flurry of collective activity that television galvanizes. It is not without regret that the novelist afterwards returns "to the Outback world of writing and print, and to that extraordinary imaginative form where creation and invention can occur without any of this trouble, where at best the result will be decidedly better, but hardly known, hardly seen, hardly inspected, hardly remembered, because after all if it has been on television it has not been fully published at all".

This is an attitude which would have enraged Dr Leavis, and if he is to be judged by his efforts to raise cultural standards, Bradbury is more serious as a novelist than he is as a critic. In *The History Man* and *Rates of Exchange* he is faithful to his original ideal of the artist as essential critic of public life, but, marred as they are by ideological and over-zealousness to second-rate writers (such as Rex Wersner and John Berger), the book reviews and shorter essays assort oddly with the admirable attempts to define modernism and post-modernism.

These three books by leading Labour moderates, all published within the first year, will give to future historians an interesting composite picture of the temper and aspirations of this political grouping in the eighth year of the Thatcher regime. They also give - to those readers like myself whose obsession with education leads them first to "check" in the index of any political treatise - a valuable, if somewhat limited, insight into the place education is seen to occupy in current socialist philosophy.

They have rather different purposes. Frank Field's book is a re-issue under a new title of his 1981 *Inequality in Britain: Freedom, welfare and the state*, with a new introduction by Neil Kinnock and a new postscript by Field himself. The original was an impressive documentation of the effects in Britain of our tax and benefit systems. Together with an analysis of the "five welfare states": the traditional welfare state, as it is most commonly understood, and alongside it the four others that are just as influential to determining how wealth and services are distributed. These are the tax allowance welfare state, the unearned income welfare state, the private market welfare state and the company welfare state.

The new edition brings up to date the story of the widening gulf between rich and poor, and lists all the deliberate steps Mrs Thatcher's governments

BOOKS



"A Prize Bull and a Prize Cabbage", by W. Williams, 1804: one of the illustrations in James Ayres' *English Naïve Painting 1751-1900* (Thames and Hudson £6.95), which demonstrates in many delightful ways how freely the imagination can soar when unencumbered by an academic training.

It takes a worried man...

Anne Sofer on the theme-songs of the Labour moderates

Choose Freedom: The Future of Democratic Socialism. By Roy Hattersley. Michael Joseph £12.95. 7181 2483 9. Freedom and Wealth in a Socialist Future. By Frank Field. Constable £7.95. 0 09 467380 2. Socialists in the Recession. By Giles Radice and Lisanne Radice. Macmillan £8.95. 0 333 38846 1.

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The new edition brings up to date the story of the widening gulf between rich and poor, and lists all the deliberate steps Mrs Thatcher's governments

have taken to make the rich richer and the poor poorer. Frank Field's strength lies in asking a painful moral question through the painstaking collection of facts rather than through polemic or exhortation, and this is a book well worth having.

The Radices' *Socialists in the Recession* also makes its argument through illustrative example. Its purpose is to prove that the socialist governments of Europe coped better with the recession of the Seventies and Eighties than did the right-wing administrations. Even when forced to curb public spending or impose austerity regimes, they managed to sustain employment and social programmes at more humane levels, and generally adopted policies that encouraged social cohesion.

It is a modest enough claim, backed with a wealth of economic data, but it rings with a slightly sad hollowiness in the light of the swings to the right in several of these countries - Austria, Germany, France - in the last few months. If these governments were so effective, why did they get thrown out? Socialists are not good at being self-critical about the resonances of the word "socialist" in the wider apolitical public. However, the claims the Radices make for the success of Swedish social democracy have been confirmed recently by as unlikely a political ally as the *Economist*.

The Radices use the terms "socialist" and "social democrat" interchangeably, and indeed the existence in Europe of parties with both labels, some inside and some outside the Socialist International, is becoming a serious complication in the whole business of political definition. However, the purposes of this book, the authors are sensibly more concerned with analysing the effects of

particular economic policies than with fussing overmuch about political labels. In the introduction they claim that their enquiry is intended to be of interest "not only to committed Socialists, but to all who want to see Western democracies respond in a more creative and humane way to the problems of our time". This tone makes it possible to read this account with a comfortable mixture of interest, scepticism and sympathy.

Not so Roy Hattersley's heavy tome. *Choose Freedom* seems to have been written to annoy: on every other page a compulsory sneer at the SDP, as well as a patronizing rebuke to one or other rival faction within his own party. These usually start with a phrase like "Some socialists do not understand..." or "Socialists should never make the mistake of believing that..." It is reminiscent of a grammar school headmistress at her starchiest. ("Girls at this school do not eat ice-cream in the street!")

All three books repeatedly make a point that has become something of a worried theme song for the Labour Party. They stress that they care about freedom - but argue that freedom, to have reality, must depend on a certain degree of economic security. The Radices quote Olof Palme: "Freedom lies in security of employment and welfare." And Frank Field, who was singing this tune before most of the rest of the Labour Party put it thus: "The overriding aim [of reform] is to increase the freedom of large sections of the community by eradicating poverty."

This would seem to large sections of the population as incontrovertible. But Roy Hattersley tries to extend the argument further by using not the words "welfare", "security", "abolition of poverty", but the code word

"equality" for them all. Equality, he says, is the chief means to the overriding aim of individual freedom; he quotes Crosland in support: "until we are truly equal we will not be truly free."

But what did Crosland, and what does he, actually mean by "truly equal"? Neither are promoting any notion of an actual arithmetic equality of income. Complete equality is rarely taken seriously as a possible, or even desirable, goal. "Less inequality" would of course be agreed across a wide political spectrum as a moral and social priority. But when we ask "How far do we want to go?", we are lurching through the shifting sands of pragmatism - the argument being more one of degree than principle - rather than striding forward on the firm ground of ideology. Hattersley tries to keep his balance by swinging an intellectual cudgel round his head: with it he tries to batter the two concepts "freedom" and "equality" into synonymy. It doesn't work. On almost any definition of the words they are different - sometimes related and sometimes in conflict.

In attempting to make every policy proposal fit his neat formula of "Greater equality equals greater freedom", Hattersley seems to me to draw dangerously facile conclusions about education. The enemies are the familiar old socialist demons - the "rich and powerful" and the "aspiring middle class". He claims that to abolish the independent schools would increase the freedom of the children of the working class. But would it? Thinking of the quality of education now on offer to children trapped in the schools of Hackney or Brompton, I can think of other priorities. What would increase those children's freedom would be, on the one hand, to bring the quality of the worst schools in each

area up to the quality of the best and, on the other, to make substantial improvements in the housing conditions and employment prospects of their parents. Hattersley may be ready for the redistributive side of this programme, but has nothing to say on the equally vexed question of how the quality of public service is to be improved.

Even Frank Field, who normally sees things with great honesty and clarity, seems short-sighted in his comments on education. While it is true that many existing concessions to the independent sector represent a subsidy to privilege, an obsession with this abuse blinds him to a much larger educational inequality which is arguably a far greater black to the freedom of majority. This is the inequality between the minority who continue their education at the state's expense to the age of 21 or 22, and the majority who make no further claim after the age of 16. If, in the future, trained intelligence and job mobility are to be important keys to personal freedom, then redistribution of educational resources is a nettle we will have to grasp.

The Radices' review of the European democracies says little about education - a pity, particularly given Giles Radice's present post. But what does come across clearly is the common policy in continental Europe (and it spreads well beyond the left-wing parties) of investing more heavily in education and training during a recession.

Nobody doubts that Labour would promote higher spending on education, in line with this common European pattern. But would they even know where to start on the issues of better quality and accountability in return for that higher spending?

Rebecca West: A Life. By Victoria Glendinning. Weidenfeld and Nicolson £14.95. 0 297 79087 6.

Rebecca West was an early feminist allergic to Jung's assertion that a man should live as a man and a woman as a woman. She noted that men reserved the main advantages for themselves, confusing, in Glendinning's words, sexual freedom with sexual availability. H. G. Wells left her an unmarried mother. Prudently, she fled from Chaplin. Her own concern with abstractions, asstringent political morality, contempt for the "weak affability" of most literary criticism, and for quietist weaklings who preferred to be right, rather than to do right, denolished distinction of gender. Essayist, critic, major journalist, historian, novelist, she wrote on Henry James, Augustine, Shakespeare, Proust, Kafka, the Nuremberg trial, post-war traitors and murderers, and much else. Her huge controversial book on Yugoslavia, *Black Lamb and Grey Falcon*, literary travel, autobiography, political philosophy, Glendinning rates "a great work of romantic art constructed over a framework of research and scholarship". One doubts if this would have been accepted as highest praise, though the book is an anthropologist's delight: "This Orestes was an Ilyrian adventurer who had at one time been secretary to Attila the Hun. It can never have been a satisfactory reference."

She was disrespectful to the established, even if they were her own friends: "Wells at least had an idea that people would have ideas if they were taught by other people who had some, and was also almost as subtle a controversialist as Voltaire when he met with an irrational fool, but Shaw stands for nothing but a socialism which has nothing to do with belief that it would be a nicer

Polar opposites

Peter Vansittart on Rebecca West

world if everybody were all clean and well fed, which is based on no analysis of man and depends on no theory of the State, and an entirely platitudinous denunciation of hypocrisy, which nowhere rises to the level of *Tartuffe*."

For G. B. S., devoid of malice, "she could handle a pen as brilliantly as I ever could, and much more savagely". Of this, we are given ample demonstration. Edward VIII reminded her of "a telephone exchange without enough subscribers". She despised Churchill, thought Harold Wilson a "laddered stocking", felt Thomas Hardy's ancestors must have included a weeping willow, and that Strindberg "could not write". To be embraced by Ford Madox Ford was "being like the toast under a poached egg". Vera Brittain was "a trumpeting ass", Michael Arlen "every other inch a gentleman", and to Malcolm Muggeridge she wrote, without sending it, "you are, at any time, a revolting personality".

Her wit could be less melodious but more convincing than some of her metaphysical and philosophical generalizations. "It is sometimes very hard to tell the difference between history and the smell of skunk." Of the Parisian élite, "How realistic are the French to keep at their doorways a perpetual reminder that the body of man is contemptible and his nature fundamentally evil".

All this suggests a turbulent, self-assured, virago, sometimes rather polysyllabic, but

knocking people flat. Victoria Glendinning described a personality very different. Born of a family genteel but run-down, West's intellectual rigour did not forbid a craving for pleasure, as literal and symbolic compensation for early deprivations, nor a belief that pleasure-lovers served society better than pleasure-haters. The early disappearance of a romantic, gifted but unsatisfactory father left her forever emotionally insecure, self-distrustful, sometimes paranoid, with lasting sympathy for underdogs, refugees, losers, and with an inability to admit error. She was attractive: Violet Trefusis recalled "a voice like a crystal spring and eyes like two jaguars", yet with effects that could over-alarm the men she most desired. A failed actress, she had an inner world of stark contrasts, in which she self-dramatized as frustrated wife, abandoned lover, mistreated celebrity, persecuted and misunderstood saving being, of powerful but frustrated sexuality, vulnerable physically and mentally, cleaving to such unsatisfactory father figures as Wells, Beaverbrook, and her own husband.

She saw herself as embattled in a man-made world of deplorable politics, rampant stupidity, considerable malice, in which communists and fascists were refugees for the witless, though some of her virulence towards political extremists came from her own psychological tendency to seek polar opposites to her own values. She



was to guard her independence ferociously, while expressing resentment towards the men who encouraged her to do so. "One of these, the selfish philanthropist Wells, referred to her current state of mind as 'a mixture of maturity and infantilism', though adding, 'I had never met anything like her before, and I doubt if there was anything like her before'."

This is not the full biography. Dame Rebecca desired two: a shortish one by Victoria Glendinning, a longer one by Stanley Olson. This first one gives perceptive comments on individual lives, but is primarily a moving narrative of the woman's life, not a study of her work. The second one, the excellent Bamber Gas-

Victorian Values. By James Walvin. Andre Deutsch £9.95. 0 233 98106 3.

As historical adviser, Dr James Walvin regularly provides a major share of the credit for the excellent Granada series *Victorian Values*. But although his accompanying book is intelligent and informative, it rather suffers from its origins. The formula it uses seems to work better on television than in print.

Received ideas about the Victorians tend to be so simple they can be stated in a couple of sentences, and the myth can then be shattered with a few picking counter-examples. If we believe, for example, that the Victorian age was an era of rugged individualism when the state refused to intervene in economic life, we will learn better from even a short film sequence of the system of the London sewerage system of the great town halls in the North of England, or extraordinary photographs which have withstood the years almost as well as the presentation of the series, the excellent Bamber Gas-

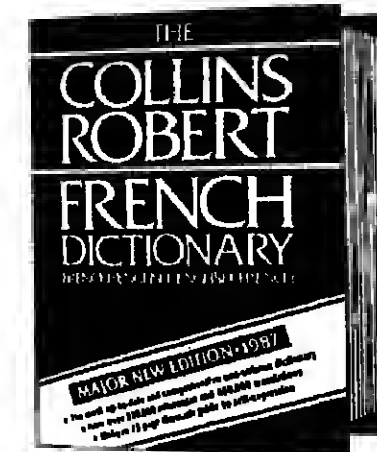
coigne. Similarly, Dr Walvin tries to refute the idea that Victorians were sexually repressed and prudish with a few episodes of nude bathing at Ramsgate and Torquay, including the Rev Kilvert's fascinated description of a naked young girl. This is all right as far as it goes, but it results in a rather thin kind of social history.

The book's central stress is on the increasing urbanization of life during Victoria's reign. This may not have increased poverty, but it certainly made it far more visible. The manifest failure of *laissez faire* to alleviate distress led to state intervention. Walvin emphasizes the crucial importance of sanitation, as much as better medicine, in improving health. (Even the Thames below Parliament, during "The Great Stink" of 1858, was described by Disraeli as "a stagnant pool reeking with ineffable and intolerable horrors".) It is no surprise that legislation soon followed. Yet in the year of Victoria's death, the young Churchill said of the Thames: "I can see the City in an Empire which ten years later the waves

and is unable to flush its sewers." Such attitudes led to the birth of the welfare state, but the foundations had been laid long before - by clear-eyed reformers who had been byed around them, seen innocent suffering and tried to remedy it. Many were inspired by what was then a new idea - that "vices" are caused by bad environment as much as bad character.

Dr Walvin suggests that other "Victorian values" like piety were loudly favoured by a vocal minority precisely because most people were not pious. Private charity was common, but "of only marginal value to its recipients". The age did see new kinds of intense patriotism, but they may have been an outmoded liability to the nation even by 1901. Ideals such as thrift, which we may well admire, long predated 1837. All this forms a healthy, if hardly very startling, polemic. We are left to draw the morals we wish from the past: Dr Walvin's, it seems, are almost the exact opposite of Mrs Thatcher's. Matthew Ralsz

'La Passion des Mots'



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THEATRE/DRAMA

Work in progress

Nick Baker on opportunities for young playwrights

The Royal Court Theatre in London was the first to run a young playwrights' festival, 13 years ago. This will be the first year they have not done so, and the omission marks a turning point in the way young playwrights' events, festivals and competitions, now popular all over the country, are run.

The Royal Court Young People's Theatre has missed a year in order to devise a scheme that doesn't end with the "prize" of a professional production for a handful of young playwrights. The emphasis will be on process, rather than product. Writers under 20 years old in three targeted Regional Arts Association areas will receive continuous attention both from the YPT and the main house, throughout the year. Artistic director Max Stafford Clark is one of the professionals pledged to give personal help. The idea is to stimulate writing, build by direct work with young people, and by running sessions with teachers, community workers and youth workers. Selected writers in each of the three yet to be named areas will then go on to intensive long weekend sessions, working with professionals on final drafts of scripts. From these sets of writers, a varied three week programme of productions will be mounted (in June '88) at the Royal Court Upstairs and in one regional venue.

same. Heidi Thomas, who won an under 21 special category prize in a National Youth Theatre competition two years ago will have her new play about slavery, *Audigo*, premiered at Stratford later in the year.

Stratford East's London Young Playwrights Festival looks like being the shape of events to come, with the accent firmly on teaching and workshop sessions from professionals, and not an "finished" main house work.

"If you're organizing a competition, you're getting rid of people," says Derek Brown, who ran this year's festival. "The idea is to allow everyone to come. The ones who want to can get professional advice to show scripts to directors, who are often in a better position to advise than writers." Stratford East has also managed to fund regular workshop sessions for young writers, as a direct result of the festival's success. For Brown, the discovery of an immediately stage-worthy new writer is a pleasant bonus.

There's strong interest from the Theatre Royal in one young playwright, Harriet Bains, who first came to light at the festival. His play, *Fighting Kite* will soon be seen in a workshop production and there's a strong chance of a main house showing.

There are still considerable differences in approach to this type of event. At one end of the scale, there's still the

with events in Wales and Scotland. The Made in Wales stage company run their yearly event for under 21s on the competition model (one winner getting a £50 prize plus a production), but its Scottish counterpart, run by the Scottish Youth Theatre is undergoing a change. Until now, three scripts from young writers have been selected each year for production. This autumn, 12 new playwrights will be invited to take part in a two-week workshop style festival, culminating in rehearsed readings.

Variances on the theme can be by gender as well as by region. South London's Albany Theatre are organizing "Second Wave", a competition for women between 13 and 30 aimed at "redressing the balance of female playwrights in the British Theatre today". Incidentally, no such imbalance exists in young playwrights' events, which seem healthily mixed.

It's the second year that the Albany has run such an event, and although it's along the old competitive lines, the facts that it extends to the upper age limit of 30, and that last year's average entrant was 24 bring to light an important point. According to festival director Anne Considine, it means that mothers who have brought up young children aren't necessarily left out. Take the point one step further and it could be argued that there should be opportunities for aspiring playwrights

Stages in Drama. By Kate Smith. Foulsham £1.75. 572 001359 0. Teacher's Edition £3.50. 572 001360 4.

This is a book to please under-achievers - and I don't just mean pupils. Ostensibly a "drama coursework book" for 9 to 16 year-olds, it boasts in its preface that its "lessons are addressed to the pupils themselves and need little participation from the teacher."

Indeed, it is the first textbook I have seen which actually suggests that teachers might like to keep copies of it at home as well as at school for occasions when they do not feel up to going in. "After all, it is much simpler to phone home for a couple of page numbers or say 'choose any suitable lesson from the book *Stages in Drama*' than sit down at 7.30 in the morning and start thinking up possible drama lessons."

Would that its pages contained something constructive or supportive for the forsaken pupils. One lesson asks simply that pupils "Draw just the face or even the whole body to show each of these characters: witch or devil, fat landlady, someone from outer space, any character from the past, drunken man or tramp." And that lesson, heaven help us, comes with the warning that it is more suitable for the older end of the age range. Another "simple lesson which can be taken by any teacher" is for groups to choose one of four titles (*The Mistake*, *Voices in the Dark*, *The Secret and the Help*) and work out an improvisation in some way connected to the title. There are no hints on characterization, structure or development: simply a suggestion that pupils who have worked hard might wish to show their work to the class.

This vagueness recurs again and again. "Show any of your work if you wish." "Play the game for a further few minutes." "The game continues until the bell goes." A lesson on interviews begins, "Quickly set out three very different interviews." (The author's italics; not mine.) A few lines later, pupils are asked to think about the "acting" they have done. "Have you really built up reality into your characters?"

These activities are interrupted by superficial outlines of Greek, medieval, Shakespearean and Victorian theatre. There are questionnaires ("so much more fun to do than most other kinds of written work"), a few line drawings and such comforts as "Read through the lesson with a class before beginning and then relax as pupils enjoy the challenge." "If you want a 'drama coursework book' that will keep pupils firmly within the

Teacher's role

David Self on teaching drama

bottom band of achievement as defined in the London and East Angles GCSE drama syllabus, this is it. It is a book simply to cover your absences, this could be it. Just don't be surprised when you get back to find that drama has been removed from the timetable.

Time for Drama. By Roma Burgess and Pamela Gaudry. Open University Press £6.95. 385 15249 X.

It is something of a surprise to find the "handbook for secondary teachers" Anthony Adams' generally excellent English, Language and Education series. Surprising not because it is primarily a book for specialist drama teachers, and certainly not because it is Australian in its origins and preoccupations. (Hulks, comics, transportation, and Ned Kelly are followed by a mastermind-level project, *History of Australian Drama 1950-1980*.)

It all begins very soundly. You can tell this because the authors write about "human development learning", "commonality" and "the social nature of the group". What is genuinely acceptable is that the book is a non-partisan. It rejects such ponderous arguments as "theatre versus drama", "subject versus method" and "process versus product". It accepts that the strange subject can embrace personal growth and the school play, small group improvisation and theatre visit. It sees a role for the teacher beyond that of jolly Redcoat or social worker.

But this is where the surprises begin. Yes, the drama teacher must inspire, encourage and, yes, teach and correct. But in successive chapters of "educational" or classroom drama, Burgess and Gaudry see the teacher as playwright, director and actor. He wonders then that many of the lesson plans that form a large part of the book are so very prescriptive. With their detailed instructions and closely controlled movement exercises they are a times reminiscent of early Music and Movement programmes. "Students spaced around the room and develop... frozen body sculptures." As we progress upwards through the school they become even less imaginative. "Read the texts. Write a brief summary of the plot. Write a short description of the main characters. Describe the settings..."

Yes, it is good to find a book that is both theoretical and practical and it is interesting to consider the similarities between drama in education and theatre but, ultimately, this book's main appeal will be to students hoping to crib an essay and two teaching practice lessons from the same source.

Classroom cues and clues

Plans for Today. By Michael Church and Betty Tadman. Longman Knockout £1.60. 0 582 24392 0.

Michael Church and Betty Tadman have taken a tried and tested teaching strategy and used it as the basis for an interesting set of starter plays. All 21 are incomplete in themselves, but they have a hidden past and a hidden future. Thus they can be read, acted, discussed, combined, or used as a stimulus for new writing. They are conveniently grouped under broad themes: Colliding: Worlds, Family Affairs, Growing Pains, Cross Purposes - and the final section, simply a collection of off-beat newspaper cuttings, reveals something of the authors' own method, encouraging children to embark on their own work.

Contemporary issues are examined in a genuinely contemporary setting. We are concerned with characters from different ethnic backgrounds; there is an attempt to show women in a variety of roles, as mothers, one-parent families, children brought up by grand-

parents; not necessarily portrayed as a problem in themselves, but forming a recognized back-cloth against which other questions are raised. Some ideas owe a lot to soap opera, and some probably the more powerful teaching tool as a result. I particularly liked "Redundant" and "Uncle Mole". Short open-ended pieces offering scope for students and plenty of room for teachers to deepen the work. Sometimes the writing offered is so slight, almost inviting children to do the work. Thus they can be read, acted, discussed, combined, or used as a stimulus for new writing. They are conveniently grouped under broad themes: Colliding: Worlds, Family Affairs, Growing Pains, Cross Purposes - and the final section, simply a collection of off-beat newspaper cuttings, reveals something of the authors' own method, encouraging children to embark on their own work.

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THEATRE/DRAMA

Ideas in residence

Judy Meewezen on a primary drama project

Theatre-in-education companies and drama in education depend upon a teaching profession which is prepared to acknowledge the authenticity of dramatic experience as a learning process and teachers who will, to a lesser or greater extent, immerse themselves in it amongst their pupils. At Charlotte Mason College in Ambleside, Kathy Joyce has recently designed a new syllabus for drama specialists on the B.Ed degree course in Primary Education. When the Curriculum Education Authority issued a policy statement pledging a commitment to multicultural education, the new plays on offer by the Theatre Centre in Islington seemed an ideal basis from which to get the ball rolling. A residency of three weeks was arranged to include workshops and

performances at the college and at schools in the surrounding area. Students, teachers, pupils and parents were all invited to join in. Naturally the presence of a theatre company, particularly one with such exquisite credentials, is an invaluable boost for specialists, but students and teachers who did not normally teach drama took up the opportunities to partake in workshops and discussions arranged outside scheduled college timetables. Kathy Joyce was delighted at the

response. "Almost every student in the college could perceive the quality of TIE work; they could see that far from being patronising, it is also enjoyable for adults on their own terms."

Coming from their base in Islington to tiny schools scattered on the Cum-brian hillsides must have been something of a culture shock to the two companies who visited Charlotte Mason from Theatre Centre after tours of London and Bradford. Lin Coughlin, author of one of the plays,

assured me that her first priority as a writer was to begin with the child's experience. Since the cultural haves of potential audiences differed so widely, it was important to settle on universal ideas within the experiences of the characters, which might be relevant to people who hadn't shared in them.

The strength of Ms Coughlin's work is clearly in the depth and clarity of the characterization. Her play, *The Fantastic Forgotten Voyage* is the fictitious weaving together of a number of biographies of remarkable women. Their histories have gone largely unrecorded, but for fragments of church and notecards. In 1718 an Irish woman, Ann Clancy, sailed around the world alone in a boat she had built herself. In the course of the play, the sailor arrives in Jamaica and meets a herbalist and engineer and later an American writer. When the hunt returns to Ireland with all three of them aboard, they harbour an Irish woman on the run from the English for the crimes of playing music and telling stories. As well as the hidden history of each of the four women, there is a hidden history of the oppression of the Irish, which is given historical links with the better known atrocities in Jamaica. Fortunately the play does not dwell with bitterness on its political aspects, but examines the characters in detail, presenting a shining, positive image of each woman. Their loss is spoken not so much in socio-economic terms as from the point of view of the absence of a lasting voice, with which their achievements may be publicly declared.

Aslin Bantle, excellent in the role of Pilo the herbalist, described some of the difference in audience response:

A scene from *Whispers in the Dark*

Highlights and low

Marsha Hanlon asks how theatres are preparing for GCSE

How to cope with the GCSE literature syllabus is not only being debated to school staff rooms, but in theatre green rooms as well. For repertory companies whose annual Shakespeare production is chosen with an eye to school malice, and for theatre-in-education groups whose participatory drama workshops are based on O level tests, freedom for schools to choose their own reading raises important issues.

If there is no syllabus requirement to study a complete Shakespeare play (or, indeed, any Shakespeare at all), do theatres have a responsibility to make one of his plays available to school students? Should theatres decide what's good for pupils, or is their educational role merely to respond to teachers' needs? If so, how can they simultaneously meet the needs of one school studying the literature of World War One for GCSE, and another examining gender roles in literature? And, of overriding importance, how can they now choose a play that will bring in the bookings?

One recurring concern relates particularly to Shakespeare. "I can't see many schools completely opting out of teaching Shakespeare," says John Taylor, director of the Schools Shakespeare Workshop run by the Orange Tree Theatre in Surrey. "But some teachers, afraid that children find it difficult or boring, may decide to study only highlights - scenes filled with action or romance or humour. This is potentially very limiting. Eventually you have to look at it in its entirety to understand its structure." Gordon Scammell, education officer of the Royal Shakespeare Company, agrees. "You might as well read two lines of a poem," he says, "or listen to popular songs without ever appreciating the rich tapestry of a complete opera." He believes the option to offer pupils "Shakespeare's greatest hits" instead of a complete play is a weakness of GCSE. "But it's not up to us to change things. That's for the teaching profession to do. Our responsibility, as I see it, is to give support and encouragement to those who want to teach Shakespeare properly."

term is Leeds teacher Jennifer Spence, who's researching the implications of GCSE for Shakespeare teaching. She's optimistic about the future, when the study of literature is no longer viewed as "a conspiracy between teachers and pupils to defeat the examiners." She looks forward to a time when seeing Shakespeare performed will be a happier experience for pupils, as they won't worry whether it will improve their exam results.

Mr Scammell anticipates no shortage of right-thinking English teachers, having just met with the enthusiastic group seconded this term to the Cambridge Institute of Education's Shakespeare and Schools Project. "I can't see any of them teaching highlights," he says, "and there are many more like them who'll take the lead and influence their colleagues. They're the kind of teachers the RSC and other theatres will want to support."

One of those seconded to the Shakespeare and Schools Project last



Falstaff: a survivor?

Falstaff: a survivor? term is Leeds teacher Jennifer Spence, who's researching the implications of GCSE for Shakespeare teaching. She's optimistic about the future, when the study of literature is no longer viewed as "a conspiracy between teachers and pupils to defeat the examiners." She looks forward to a time when seeing Shakespeare performed will be a happier experience for pupils, as they won't worry whether it will improve their exam results.

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A scene from last year's Royal Court Young People's Theatre production of *Romeo and Juliet*

Like many of her colleagues in the field, Royal Court YPT director Elise Dodgson flinches at the word "competition". She wants to make the festival "about the potential of the many, more than the excellence of the few", and there are plans to encourage writing from minority groups, and a special series of workshops integrating disabled and able bodied young writers. All the same, to guarantee a good final programme, an element of selection (if not competition) will still be there.

The RSC at Stratford is also having a break and a re-think, after two successive years of running such an event. Education officer Tony Hill explains that there's a danger in creating false expectations among those who get their work performed, and see a primary duty to provide an educational experience rather than a competitive one, or one that's based on giving the playwrights a professional training.

Like many of his colleagues in Young People's Theatre, Hill adheres to the ideal that it's primarily on educational and recreational process based on giving people as broad a practical experience of theatre as is possible. That process, however, is much harder to provide for young writers than it is for actors, designers or technicians. And while it's crucially important in the long term for theatres to keep a finger on the youth pulse, Hill is not alone in stressing that young playwrights' events' main purpose is not to create theatre PR or "trawl" for much sought after new talent. All the

straightforward competition, like that at Liverpool Playhouse, sponsored by National Girobank and judged by a team led by Alan Bleasdale.

Competitions, though, can have their pitfalls. It was recently announced that this year's winning play in the Liverpool competition was not an original work, but an adaptation of a play originally written by the entrant's father. It was swiftly demoted.

That sort of problem couldn't arise in intensive workshop-style tournaments like those offered by the Soho Poly Theatre. Under the title *Blueprints*, the Poly selects twelve 16 to 25 year olds to take part in a two-week course. Participants are selected on the basis of a one-page synopsis or starting point for a play, and work in progress, rather than finished (unrealistic) productions is presented at the end. The benefit here is that the experience is much more concentrated than that which could be offered to all at Stratford East's London Young Playwrights festival, where the turn out was 50 people a day.

However, with so many new events springing up, how can organizers be sure that the more determined writers aren't entering festival after festival with the same work? It has been known to happen. "It's the quality of the ideas that you concentrate on," answers Soho Poly's Penny Sheffton. "Frankly, if people do enter more than one event, I'd say more power to them."

There are regional variations, too,

- or those who just enjoy writing plays and want to do it better - irrespective of age as well as sex.

Young Playwrights' Events: Information Made in Wales's Young Playwright Competition culminates with this year's winning play, *P.G.* by Jesse Schwenk, Sherman Theatre Cardiff, until tonight as part of Made in Wales's *Write On!* Festival.

Liverpool Playhouse Studio: May 7 to 10. *Slingshot*, the four winning plays from the Playhouse Young Writers Festival, Sponsored by National Girobank. Closing date for script entries to *Second Wave* at the The Albany Empire, Douglas Way, London SE8 4AG is July 18, 1987. Open to women between 15 and 30. Selected plays will be performed in November of this year. Entrants will receive a written critique of their work.

Scottish Youth Theatre's Young Playwrights Festival: Closing date for entries September 30. Details from SYT, 48 Albany Street, Edinburgh EH1 3QR.

New Playwrights Trust is an organization of playwrights, aspiring playwrights and other interested people and organizations, set up to support and develop the work of new playwrights of all ages. NPT's mailing information includes details of all forthcoming playwrighting events: NPT, Bethnal Green Library, Cambridge Heath Road, London E2 0HL. 01-981 6798.

ARTS



Michael Clarke



Television

Robin B.

Radio

David Se

Anne-Marie Couv.

Next week WH Smith celebrate 25 years of their admirable Poets in Schools project. Under the scheme, begun by Kit Wright when he was education secretary of the Folio Society, the visiting poets follow the school curriculum, giving poetry tuition sessions with a performance for parents and the assembled school. More than 200 poets have worked through the scheme. This term a new list of poets has been ordered through the scheme in every part of the country.

Copyright
footnote

Barry Russel

Gudrun Schubert among the art historians

Interest in different means of promoting the necessary access were the main subject of the "museums, galleries and education" section. National Gallery education officer Felicia Woolf suggested ways of overcoming some of the difficulties, though she readily admitted that museum education officers, mostly women, undoubtedly tread a "stony and winding path" as they battle to combat the view that art needs no explanation or that pupils are too young to benefit from it. A north London primary school teacher, Anne Whitaker, gave account of the profound effect made

It seems entirely fitting that a conference set up to reinterpret and investigate the past in the visual arts should come full circle by making a platform available to those concerned with the quality of the immediate first-hand experiences of the young generation.

Iola Smith

The "other" Soviet cinema of the Twenties (meaning, in effect, other than Eisenstein and Pudovkin) remains largely unknown in Britain, but many films from the period have recently become available from sources like BFI distribution. Titles include Kote Mikobidenze's *My bureaucratic nightmare My Gracious Mother* (1929). Restored in 1976, this unique mixture of fantasy and farce gained a cult following in the States and could well do so here. It is being shown at the National Film Theatre on May 15 as part of a season on Kozhinstan, Trauberg and the Other Soviet Cinema. F

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ARTS



Libertines – like making the white rabbit an ardent Spurs supporter – are liberally taken with Alice's story in Ferris in Wonderland at Chiswick Road, North London's young people's theatre and music group. Performed by an integrated cast of over 50 able bodied and disabled actors, the disabled taking most of the lead parts, it's an extravagantly colourful version of Alice, seen through the eyes of Ferris, who celebrated her 19th birthday on the day of the last performance. Ferris Bird (her real name) is autistic, and cannot speak. Two other Ferris's do her talking and singing for her. Her friends say they are amazed at the way she responded through rehearsal. Her increasing ability to smile and chuckle is cause for celebration, as is this ebullient and tuneful treatment of Carroll's original work.

Nick Baker

Firemen's strike

Shout! Zip Theatre at Merridale Street Fire Station, Wolverhampton.

For their touring production for the next couple of months, this community theatre group, which is substantially funded by Wolverhampton borough council, has devised a documentary musical play about the 1977 firemen's strike.

Starting from a discussion in a present day fire station, the action goes back to the beginning of the strike and traces it as it might have been experienced by a group of West Midlands firemen. We see them arguing the morality of their action; we hear the speeches of their union conference; we see them on the picket line and we hear the complaints of their wives. The story is told with great pace and power. The glaring contrast in 1977 was between the dangerous and highly skilled work of the fireman and the derisory wage which he took home – considerably less than the national average. The play makes the most

this and loses no time in telling of men who left to become milkmen at considerably higher rates of pay.

The play is immaculately researched and always convincing. The cast of eight work hard to create the illusion of a much larger number of players and they leap into their musical numbers with great versatility and skill. The real drama for me, though, was to sit watching this play in the fire station rest room with an audience of firemen and their families. The power of the play's message cracked through the room in a tangible way and on two occasions the action was momentarily halted while a genuine call-out (or "Shout!") came over the Tannoy and uniformed figures ran from the room.

Zip Theatre will bring the play to organizations for a reasonable fee. As well as fire stations, it is eminently suitable for community and educational groups of all ages from about 15 upwards.

Gerald Haigh

Zip Theatre can be contacted on 0902 736365.

Life, love and war

Across the Barricades. Battersea Arts Centre Youth Theatre

From the start, with its machine-gun bearing soldier checking tickets and searching 'bags', the stark, heavily-daubed corrugated iron "scenery" and the background music of IRA and Loyalist marching songs, *Across the Barricades* shows the harsh realities of life in war-torn Northern Ireland. Against the background, Kevin and Sadie – the Catholic and the Protestant – try to maintain a balanced relationship. On both sides, there is forceful pressure to separate them. Kevin and Sadie are peacekeepers, his sister Brode and her brother Tommy are moderates, both sets of parents are deeply committed to each "cause" and their peers, most strongly of all, are violent, prejudiced and vindictive. These clearly distinct attitudes are all well expressed and explored in this adaptation of Joan Lingard's novel. Though the second half of the play loses some of its earlier compulsion, it remains to the end a powerful and thought-provoking vehicle for conveying both the actuality of the situation in Northern Ireland and a parable for the range of reactions and feelings which a mixed-race can create.

Shakespeare's Southwark



This design by Jenni Nell, aged 15, from Warwick Park School has won the senior section of a poster competition organized by the Shakespeare Globe Museum in London. Over 170 entries were received from Southwark schools and are on exhibition at the museum. The judges – Anthony Harris, head of Camberwell School of Art, Michael Spender, director of the Bankside Gallery and Heather Hall of The TES joined Lady Digney, assistant administrator at the Museum in the difficult task of choosing the prize-winner. The senior winner was thought to be both striking and witty, with its tiny brightly-coloured "characters" displayed on Shakespeare's doublet. The winner in the junior section was the work of Ketti Taylor, aged 10, of St Paul's, Walworth, with its distinctive domed portrait of the Bard. Both these designs will be used as publicity material for the Globe.

Triumph of hope

The Best Years of Your Life. By Clive Jermain. North Chadderton School Stage Society, Oldham.

Clive Jermain's television play, *The Best Years of Your Life*, was transmitted by the BBC on May 14, 1986. The 20-year-old author battled against advanced spinal cancer to reveal that date alive. Now he is busy extending the play for production at the Half Moon theatre in June. In tribute to its impact an enterprising school near Oldham anticipated him with their own stage version.

The story is of a 17-year-old apprentice footballer who is diagnosed to have an apical tumour. It opens on his confinement to a wheelchair after an unsuccessful operation. But the obvious parallel with the author should not deceive anyone into expecting morbid introspection. The play coolly posits a hero whose loss of mobility matters in a way that enabled the author to describe himself, with some wryness, as "lucky"; and pathos is firmly subordinated.

The adaptation, by sixth-former Matthew Dunster and director Colin Snell, was resourceful. Episodic scene-shifting was smoothed, while loss of realism was even turned to advantage. Matthew Dunster, as brother Mark, soloquized narratorial links with a vernacular sensitivity that both blended with the action and extended his characterization. Strobing the opening, in which the youth star is lifted by his team-mates, at once fixed an image of an athletic life and gave it dreamlike remoteness. A triangulated stage narrowing to a bedroom was wedged in by the audience forcing it against the embarrassment of pain and

enhancing it to share in scenes of intimacy and physical constraint. The corner debauched into the physical spaciousness of discotheque on a typically constrained or isolated. The disco was a nice adjustment from Jermain's pub since it drew on the school's greatest resource, brotherly young bodies, to show how easily teenage relationships are confounded to stress the unnaturalness of Robert's status.

Disco music well conveyed the vitality of normality set grossly against the brothers straining over the bedding routine. But I disliked the Smiths, whose drawing was supposed to echo more private feelings. Their lyrics roughly applied ("Disco rule the body or does the body rule the mind? – I dunno") only made the banality more apparent, and tended to put back in the mind what Clive Jermain had straining to exclude. The epilogue soloquized, backed by "There is a light that never goes out" and affirming that Robert had shone such a light into other lives, seemed to me superfluous, detracting from the Jermain ending which, with fine humility, collapses the dead Robert with the awkward embrace of a formerly jarring father and surviving son.

Closing spotlight on Robert's empty wheelchair, on the other hand, was timely made one aware that the person of Robert had little to do with this physical moorings, whether in a paralysed body or a mental assembly. The play asks what it is to be human and dehumanised, and by doing so wrests from an unsharpened home a mood of sombre hope.

John Stachniewski

Germ war

The tale of how two determined germs were fatally thwarted by penicillin and disinfectant won the 1987 British Association for the Advancement of Science National Drama Competition for Schools held at the Sherman Theatre, Cardiff. Performed by Newland High School, Hull, this humorous investigation into how the body defends itself against bacteria used effective dance and movement sequences, and illustrated the medical message clearly to the audience.

The best individual actor was a young man from Broadgate Junior School, Leeds, whose cameo part as geriatric limping grandad brought the house down. Unfortunately the rest of

the production – though it contained considerable botanical information about how a tree functions – was less inspiring theatrically.

St Michael's School, Truro, and St Peter's School, Guildford investigated physics – the former using dance and song to tell the story of development of the laser beam and the latter by teaching atomic structures to an inept YTS trainee wizard. There was much tongue-in-cheek humor here.

John Bentley School, Calne, Wiltshire portrayed the life of the chemist Fritz Haber, inventor of the gas and chemical weapons. Because of the ethical issues underlying science this performance was highly commended by the judges.

Iola Smith

All comers

How Kwaku Ananse Killed Mr Death. Heysham High School.

Conditioners in the seaside towns of Lancashire have been squabbling about whether to improve facilities for tourists or the welfare needs of more permanent residents. Massed new car parks are part of Blackpool's compromise and in Morecambe they've decreed a Superdome.

The new building was the venue for a holiday project devised by pupils of Heysham High School for 7 to 11-year-olds. The organizers, a mixed-ability

fifth form group, were determined to infect all comers with an enthusiasm for drama. The teacher, Don Hall, suggested a West African folktale story as a basis and donated some music he'd collected in Ghana. Clad in Morecambe market was beset with a small subsidy, in part from the children, who quickly began to help Kwaku Ananse to his quest. The teenagers managed a group of 25 unassociated youngsters and admirable tenacity. Though the session occasionally lacked fluency, it was imaginative and entertaining, an exercise in self help worthy of greater support.

Judy Meeween

Crusade

The Children's Crusade. Heathfield School Taunton.

Stephen Elliott is renowned for his handling of the enormous casts which he and his wife Helen have attracted to the productions of the Taunton Youth Theatre. So it was no surprise that he chose the challenging *Children's Crusade* for his first play at Heathfield School Taunton where he is now head of drama. Over 100 pupils took part, altering the National Youth Theatre's script of the play to suit their own needs, and singing and showing re-

the school's music department. At the end of last term, the school hall was virtually turned into a production theatre for the play which was produced in the round so as to give the effect to the many contrasts and the episodic drama affords. But all the technical devices would have been wasted without the immense power of the acting, humour and confidence of the actors. There was no attempt to romanticize the children's innocence. They were dirty, desperate and frequently dishonest, but none of the detractors from their pure determination for a cause that church and merchant states pursued with pompous hypocrisy.

Shirley

RESOURCES

TES reviewers look at new science materials

Meat on the bones



has been revised and the 25 units comprise a flexible resource – at last – that is ideal for CPVE. There is a tutor handbook, too, which shows how the individual books might be used and the relevance of the titles to the 10 CPVE core competencies. There is a wide range of topics, some with obvious scientific content (for example "fire", "noise", "motor car") and others where the science is really integrated within a topic, as in "pottery" and "understanding old age". So there are bound to be titles to appeal to every student. Each book has about 18 A4 pages and most are based on the original 1977 version.

The extent of the revision varies from book to book. In *Brewing*, for example, the bulk of the content remains the same but there is much updating on events subsequent to the first publication in 1977. *CAMERA* is mentioned, along with microscopes and microfilm, and current data on alcoholism and road casualties are given. A major improvement is the quality of the paper, so the definition of black and white photographs is better. At £1.95 each these represent good value.

Human skeletons, even plastic reproductions, are very expensive, so any alternative should be considered seriously. The *Bare Bones* pack contains a cardboard cut out, two thirds normal size, which, unlike other model skeletons, is fully mobile. It has double joints, as at the ankle and hip, and single ones, like those of the elbow and knee. The pack has four sheets of cut out parts on A6 card. There is also an A6 poster of the real skeleton and a double sided sheet of accurate and easy to read information. Instructions are clear but making the model demands accurate folding and considerable dexterity. It took 35 minutes to make the first leg and 20 minutes the arm; the second use of each limb was much quicker, as by then the trick of folding the joints had been learnt. Movements of the completed model are unbelievably realistic, but the representation of the bones and the joints themselves are so. This would be a useful present for a patient child, but not much use in the school situation.

Another alternative is to use photographs of the skeleton. In *The Human Skeleton* there are photographs on concerning pages of a full size skeleton, with front, side and back views, together with individually labelled structures for detailed study, such as the lower and upper limb bone oriented to indicate the surfaces which take part in joints. The spiral bound book is large but is certainly more convenient to use and less bulky than the real thing. It should be a useful aid to individual study in advanced biology, medical and paramedical courses.

Jackie Hardie

Practical Microbiology and Biotechnology for Schools

By Paul Wymer
Price: £15.95, from Macdonald, Maxwell House, 74 Worship St, London EC2A 2EN.

Nuffield Working with Science
25 Project books: batch 1, 13 titles cost £25; batch 2, 12 titles cost £23; individual books, £1.95 each

Longman Resources Unit, 62 Halfhill Rd, Layerthorpe, York YO3 7XQ.
Bare Bones
Price £4.30.
Methuen Childrens Books, 11 New Fetter Lane, London EC4P 4EE

The Human Skeleton
By R M H McMillan, R T Hutchins and B M Logan
Price: £15 + £1.50 p & p.
Wolfe Publishing Ltd, 3 Conway St, London W1P 6HE.

One of the aims of the GCSE criteria is "to promote an awareness and appreciation of development and significance of biology to personal, social, economic and technological contexts". But teachers wanting to introduce these ideas have faced problems, especially when they have looked towards incorporating "biotechnology" (an area embracing this aim) into their work.

Advances in microbiology and biotechnology are shrouded in specialist jargon; the vocabulary and style of many published resources are suitable for courses at A level and beyond. There is a paucity of up-to-date material for the 11 to 16 age range, and much of what is available deals with long established work in microbiology and bread, wine, yoghurt and cheese making.

Teachers have had to try and bridge the gap between the familiar and the brand new, so they are desperate for a published resource with background information comprehensible to any scientist, and simple practical investigations which are easy to do in schools and relevant for the age group.

Practical Microbiology and Biotechnology for Schools fills the gap. The pack, written by Paul Wymer and edited by John Grainger, in association with the Society for General Microbiology and the Microbiology in Schools Advisory Committee comprises 30 A4 photocopiable pupils' work cards and a 46 page teachers' guide. The majority of the 30 pupils' exercises are familiar, but there are some interesting novel ones such as enzyme immobilization. The activities could be used in a wide variety of courses and with children of different abilities.

The teachers' guide is indispensable:

On being a School Governor

– a practical video package to help train school governors

The Role of the Governor:

eleven separate sections (52 mins)

Interviewing:

Interviewing/short-listing for headship (30 mins)

Interpreting the Headteacher's Report:

falling roll; curriculum; staffing; special needs

(46 mins)

the package comes with ample supporting literature

likely issues/problems re-created in dramatic episodes

invaluable for LEA/school-based courses

covers primary/secondary, county/voluntary schools

The complete training package – excellent value at £75.88 (including VAT and p&p). Discounts available for multiple orders.

Advised throughout by National Association of Governors and Managers, Campaign for the Advancement of State Education, Southwark

Local Schools' Commission

1986 Education Act (part IV) requires that 'there is made available to every such school governor... such training as the authority considers necessary for the effective discharge of those functions'

ORDER FORM

Tick VHS ☐ BETA ☐

Please supply _____ complete training package(s) @ £75.88 (incl VAT and p&p).

Cheques payable to: FOCUS in EDUCATION

Limited, 65 High Street, Hampton Hill,

Middlesex, TW12 1NH.

Telephone: 01-783 0333.

Name _____

Title _____

Address _____



Wurwick Process Science

Set of 30 modules including folders

£150; individual modules from £4.50 to

£6.95; introductory booklet free

Ashford Press Publishing, 1 Church

Rd., Sharncliffe, Hants SO3 2HW.

good balance of skills. The modules also clearly indicate a framework for assessing these skills.

In addition to the 30 modules, there is an introductory booklet that contains the background to the scheme and also a grid that maps the skills onto the activities for each of the modules – very useful for overall planning.

When I saw the first year units I was a little apprehensive. I had that fear of

naked processes, whereby activities were offered that attempted to develop

skills, but which were completely divorced from the context needed to

make the activity relevant and meaningful to the student. I feel much

happier with these new materials. The

themes provide contexts that the pupils can easily identify with – "food

additives", for example, is a module that develops process skills by exploring

food colourings and thickening agents.

The materials also pave the way on

to GCSE by identifying key content that can be introduced. Continuity and

progression are carefully considered. The second and third year modules

could form the foundation for GCSE courses both in separate sciences and

in integrated or modular science.

I am much impressed by the materials. They provide a structure that

teachers will find very supportive, and a vast number of creative ideas for

teaching scientific processes. The

"food additive" module, for example, has an activity that develops the skill of

controlling variables by presenting the pupils with the problem of making a

non-drip ice lolly. It is clear to see how this and other similar activities can

really stimulate and interest pupils.

The modules could form a complete

course for years two and three or could be used more flexibly in conjunction

with other published schemes. However they are used they require considerable

commitment from the teacher. Most of the material is in the

form of notes for the teacher, with further support for the pupil in the

form of photocopy free sheets only available for a number of activities. A

good deal of input from teachers will be required to provide extra resources

needed for a full teaching programme.

A genuine effort has been made to keep the equipment and materials as

simple as possible. This should limit the strain on technical back-up, and

also means that much of what is used in practical work is familiar to the pupils.

I felt that the notes on equipment and materials, however, were rather

spare; there is not the same detailed information that is provided in other

schemes. This may make things a little difficult for teachers and technicians

moving outside existing subject areas.

At £150 for the set of 30 modules and introductory booklet the materials are

by no means cheap, particularly considering the extra cost of providing

materials for pupils to use. The modules do, however, provide an invaluable

resource for anyone involved in developing the school science curriculum.

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Musie

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Cleveland County Council

AN EQUAL OPPORTUNITIES EMPLOYER
Closing date: 22nd May 1987.

Application forms and further details of the under-mentioned posts obtainable from and returnable to The County Education Officer, Education Office, Woodlands Road, Middlebrough, Cleveland TS1 3DA. (Tel: 01652 48165, Ext. 3018/7) unless otherwise stated. Financial assistance with household removal expenses may be available in approved cases.

LYNNFIELD PRIMARY SCHOOL,
Murray Street, Hartlepool, Cleveland TS28 8RL

Head Teacher (Group 2)

Required for September 1987 a suitably experienced and qualified teacher for the Headship of this Primary School with a 35 place Nursery, situated in Hartlepool and accommodated in recently constructed buildings.

WHALE HILL PRIMARY SCHOOL,
Sandham Road, Eton, Cleveland TS8 8AQ

Head Teacher (Group 2)

Applications are invited from suitably qualified and experienced teachers for the Headship of this large Primary School, which became available from September 1987. The school serves an area of Cleveland and has a 38 place Nursery class.

ST CHRISTOPHER'S NEW ANGLICAN/ROMAN CATHOLIC AIDED,
PRIMARY SCHOOL, Sumner Street, Middlebrough, Cleveland.

Head Teacher (Group 4)

Applications are invited from suitably qualified and experienced teachers, who are regular communicant members of the Church of England or committed Roman Catholics for appointment, as from September 1987, as first Head Teacher of this new Anglican/Roman Catholic Aided Primary School in central Middlebrough, to be formed through the amalgamation of St Mary's R.C. Aided Primary and St Hilary's C.E. Controlled Primary Schools. The school is situated in modern premises, opened in 1987, with a Nursery and 28 full-time places and is intended, in accordance with the intentions of the Governors (The Anglican Diocese of York and the R.C. Diocese of Middlebrough) to provide a Christian education for the children of the area according to the principles of the Roman Catholic Church and the Catholic tradition of the Church of England. Previous applicants will be considered.

Completed forms should be returned to the Chairman of Governors of St Christopher's Primary School, c/o All Saints, Church House, Grange Road, Middlebrough, Cleveland TS1 2LR.

EDGEWICK COMMUNITY PRIMARY
SCHOOL, Cross Road, Coventry, CV6 5GP.
Tel: Coventry 686893

Required: September 1987:-

Head Teacher

(Group 4 plus Social Priority School Allowance £201 or £276 p.a. and plus Community Allowance of £800 p.a. which is currently under review)
Applications are invited from experienced teachers for this post.

Application forms and further particulars (large S.A.E.) from Director of Education, New Council Offices, Earl Street, Coventry, CV1 5RS. (Tel: 0203 25555 Ext. 2404) returnable by Monday, 18th May 1987.

Caravanning disqualifies.
We welcome applications from men and women regardless of disability, race or marital status.



PRIMARY HEADSHIPS continued

Headship

Mendham County Primary School
Group 2 Ages 5-11 Number on Roll 52

Applications are invited from suitably qualified and experienced teachers for the post of Headteacher. The school is situated in the village of Mendham nestling in the picturesque Waveney Valley and serves a rural community.

The appointment will date from either the beginning of the Autumn Term 1987 or Spring Term 1988.

Further details and application forms are available from the County Education Officer, St Andrew House, County Hall, Ipswich, IP4 1LJ (SAE please) and completed forms should be returned by 22nd May 1987.

St Pancras Roman Catholic Voluntary
Aided Primary School, Ipswich
Group 3 Ages 5-11 Number on Roll 113

Applications are invited from suitably qualified, committed Roman Catholics for the post of Headteacher of this well established Primary School which draws its pupils from a wide area.

The appointment will date from the beginning of the Autumn Term 1987, or as soon as possible thereafter.

Further details and application forms are available from Canon E. McBride, Chairman of Governors, St. Pancras RC Aided Primary School, Stratford Road, Ipswich, IP1 6EF (SAE please), to whom completed forms should be returned by 22nd May 1987.

Suffolk County Council



* FRINGE AREA LONDON ALLOWANCE £308 p.a. throughout the County.
* Temporary housing may be available.
* Generous relocation expenses in approved cases.

HEADSHIPS

WINDLESHAM COUNTY FIRST SCHOOL,
School Road, Windlaaham GU20 6PD
NOR 120

HEADTEACHER required from September 1987, or as soon as possible thereafter, for this Group 3 First School, for pupils aged 6-8 years.
Salary Scale: £14,235 - £14,853 p.a.

CHRIST CHURCH C OF E MIDDLE SCHOOL,
Fletcher Road, Boulaye Rise, Otterhaw,
Chertsey KT18 0JV
NOR 218

HEADTEACHER required from September 1987, or as soon as possible thereafter, for this Group 4 Middle School, for pupils aged 9-12 years.
Salary Scale: £14,853 - £15,598 p.a.

Application forms and further details for the above two posts from the North West Area Education Officer, Usborne, 3 Heathfield Road, Woking GU22 7EU (SAE please).
Closing date: 22 May 1987.

CHURCHFIELDS PRIMARY SCHOOL,
Churchfields Road, Beckenham, Kent, BR3 4QR.
Tel: 01-850 5247

HEADTEACHER

Group 5

Applications are invited from suitably qualified and experienced candidates. Post tenable from September 1987 or as soon as possible thereafter.

The present school was built in 1890 as two separate schools. A new purpose-built Primary School is due to be opened in Spring 1989.

The new premises will provide a 1½ form entry, 330 places Mixed Junior and Infant School with provision for Special opportunity classes for approximately 40 pupils (370 in total). Additionally, nursery facilities will be provided for the equivalent of 25 full-time places.

The site for the new school is a short distance from the existing premises. It is about 4 acres in all and will include a playing field.

Application forms and further details available from/returnable to the Director of Education, Town Hall, Tweedy Road, Bromley, Kent, BR1 1SB by 21st May 1987.

HEADTEACHERS REQUIRED JANUARY 1988

(Or earlier if possible)

Applications are invited from suitably qualified teachers for the following Headships:

Staples Road County Junior School

(Group 5 plus LFA £309 p.a.)

Staples Road, Loughton

Stebbing County Primary School

(Group 3)

Stebbing, Dunmow

Removal and relocation expenses of c.£4,000 are available for those who qualify.

Please send foolscap size form and details to: County Education Officer, PO Box 47, Threashedale House, Market Road, Chelmsford, Essex CM1 1LD.

Closing date: 29th May 1987.

ESSEX
County Council

Five Elms Primary School (Roll 272)
Wood Lane, Dagenham, Essex

Applications are invited for the

HEADSHIP (Group 5)

of the above-named school as from September 1987 or as soon as possible thereafter.

Salary Scale: £15,768 - £16,497 plus £1215 per annum Inner London Allowance.

Reimbursement of removal expenses in approved cases.

Application forms and further details from:

Chief Education Officer,
Town Hall, Barking,
Essex (S.A.E.), Closing
date: 21st May 1987.

Barking & Dagenham
County Council
Education Department
An Equal Opportunity Employer

SHROPSHIRE
EDUCATION COMMITTEE
An Equal Opportunity Employer

PRIMARY HEADSHIPS

Applications are invited for the Headships of the following schools which will open in September 1988. The Headships will be effective from January 1989.

- Group 5.
The Martin Wilson County Primary School, Castlefields, Shrewsbury.
- Group 4.
Greenfield County Primary School, Shrewsbury.

Application forms and further particulars (SAE) from:

County Education Officer,
Education Department,
Shirehall,
Abbey Foregate,
Shrewsbury,
SY2 8ND

To be returned by Monday, 25th May 1987.

PRIMARY HEADSHIPS continued

Deputy Headships/

Mistresses

BERKSHIRE

ETON PORNY FIRST SCHOOL

High Street, Eton, Windsor, SL5 7JF

Required for September 1987, or as soon as possible thereafter, a suitably qualified and experienced teacher for this school which has just been opened. The school is a combined school, from being a combined school, the applicant should state their area of curriculum expertise and involvement in a modern first approach.

Further details and application forms from the Headteacher (Windsor 801985), 110012

SAFORD

CITY OF SAFORD

EDUCATION DEPARTMENT

WILTON LANE C.E. SCHOOL

Widenedale Lane, Little

HEADTEACHER GROUP 4

Required for September 1987 or as soon as possible thereafter.

Applications are invited from suitably qualified and experienced teachers for the above post, to be held on a full-time basis, to be held on a full-time basis, to be held on a full-time basis.

Please send S.A.E. for application form to the Chief Education Officer, Education Office, Exchange Street, Great, Salford M3 3LJ, to whom completed forms should be returned by 22nd May 1987.

Salary Scale: £14,235 - £14,853 p.a.

Closing date: 22 May 1987.

110012

BANOWELL

METROPOLITAN

SCHOOL COUNCIL

ST. MARCO'S C.E. JUNIOR AND INFANT SCHOOL

Birmingham Road, Orsett

Bar, Birmingham

Required for September 1987.

HEADTEACHER - Group 4

Applicants should preferably be communicant members of the Church of England.

Application forms and further details for the above post, to be held on a full-time basis, to be held on a full-time basis, to be held on a full-time basis.

Please send S.A.E. for application form to the Chief Education Officer, Education Office, Exchange Street, Great, Salford M3 3LJ, to whom completed forms should be returned by 22nd May 1987.

Salary Scale: £14,235 - £14,853 p.a.

Closing date: 22 May 1987.

110012

SOMERSET

COUNTY COUNCIL

WIMBORNE PRIMARY SCHOOL

Wimborne Road, Wimborne

Wimborne, Dorset

Required for September 1987 or as soon as possible thereafter.

Applications are invited from suitably qualified and experienced teachers for the above post, to be held on a full-time basis, to be held on a full-time basis, to be held on a full-time basis.

Please send S.A.E. for application form to the Chief Education Officer, Education Office, Exchange Street, Great, Salford M3 3LJ, to whom completed forms should be returned by 22nd May 1987.

Salary Scale: £14,235 - £14,853 p.a.

Closing date: 22 May 1987.

110012

SHROPSHIRE

EDUCATION COMMITTEE

An Equal Opportunity Employer

PRIMARY HEADSHIP

GROUP 3

Applications are invited from suitably qualified and experienced teachers for the above post, to be held on a full-time basis, to be held on a full-time basis, to be held on a full-time basis.

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Closing date: 22 May 1987.

110012

SHROPSHIRE

EDUCATION COMMITTEE

An Equal Opportunity Employer

PRIMARY HEADSHIP

GROUP 3

Applications are invited from suitably qualified and experienced teachers for the above post, to be held on a full-time basis, to be held on a full-time basis, to be held on a full-time basis.

HEADS
Gaywood Field Lane County Junior School,
King's Lynn (Group 4)

Cobholm County First School, Great Yarmouth
(Group 3)

Colkirk C.E. Voluntary Aided Primary School, Nr.
Fakenham (Group 3)

Applicants should be practicing members of the Church of England.

Further details and application forms may be obtained by sending a stamped addressed foolscap envelope to the County Education Officer, Room 32, County Hall, Martineau Lane, Norwich NR1 2DL. Closing date for applications 22nd May 1987.

Norfolk County Council

Education Department

An Equal Opportunity Employer

SHROPSHIRE

EDUCATION COMMITTEE

An Equal Opportunity Employer

PRIMARY HEADSHIP

GROUP 3

Applications are invited from suitably qualified and experienced teachers for the above post, to be held on a full-time basis, to be held on a full-time basis, to be held on a full-time basis.

Please send S.A.E. for application form to the Chief Education Officer, Education Office, Exchange Street, Great, Salford M3 3LJ, to whom completed forms should be returned by 22nd May 1987.

Salary Scale: £14,235 - £14,853 p.a.

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Salary Scale: £14,235 - £14,853 p.a.

Closing date: 22 May 1987.

110012

SHROPSHIRE



The London Borough of Ealing contains one of the largest Asian and Afro-Caribbean populations in the whole country and therefore it would be an advantage to have experience of working among these communities.

Ealing is a new Council welcome applications from all regardless of sex, race, ethnic origin, responsibility for dependents, disabilities and from lesbians and gay men.

Advisory Teachers

Stamford Hill 4 plus London Weighting £2125

For a year

Ealing is seeking to appoint a team of Advisory Teachers to assist in the development and implementation of the In-Service Training Programme. We wish to appoint candidates with experience in the following areas:

Language Development - Primary
Special Educational Needs
Home, Health and Life Skills - Primary/Secondary
Counselling, Profiling and Pastoral Work - Primary/Secondary
Computers in Education - Primary/Secondary
Science - Secondary
Observation and Assessment
Design and Technology - Primary
Classroom Organisation and Curriculum Development - Early Years/Primary/Middle
Industry, Economy and the World of Work - Primary

These posts represent an exciting opportunity to contribute to the Authority's In-Service Training Programme. They will be for an academic year from September '87 and hence will be suited to those who can obtain a secondment for that period.

For further details please contact the Chief Education Officer, Ref. DCI/ACR, Hedley House, 72-74 Uxbridge Road, Ealing W5 5SU, Tel 01-578 2424 Ext 2577 or 3272, to whom completed application forms should be returned by 18th May 1987.

(13419)

TEACHER

Lower Juniors Scale 1

Required at LISKEARD JUNIOR SCHOOL, Varley Lane, Liskeard, an enthusiastic teacher to join an equally enthusiastic team and to take a class of lower juniors initially. Please state special interests and whether you would be willing to take some responsibility for part of the curriculum. This post is available from 1st September 1987.

Application form, on receipt of stamped addressed envelope, from the District Clerk, District Education Office, Graylands, Deon Street, Liskeard PL14 4AZ. Closing date 20th May 1987.

(18987)



CLASS OF 87?

Haringey

PRIMARY TEACHERS

We will have a variety of Nursery/Infant and Junior Scale 1 Appointments in September for newly qualified teachers

WE OFFER YOU:

- Salary Payment from 1st July 1987 (worth £1,300).
- A secure start to your career in a progressive and supportive Authority
- Planned induction courses and extensive in-service training
- Among the best pupil-teacher ratios in the country
- Visits to schools to ensure you start your career in the one that's right for you
- Possible assistance with accommodation
- Full Inner London Allowance

For application form and further information please contact Haringey Education Service, 48 Station Road, Wood Green, London N22 4TY. Tel. 01-881 3000 ext. 3147.

Haringey is an equal opportunity employer. We wish Haringey teaching staff to reflect the rich diversity of the local community.

(10098)

PRIMARY EDUCATION continued

BOLTHULL
EDUCATION COMMITTEE
SCHOOL
1987. A SCALE 2 TEACHER
Required for September 1987. A SCALE 2 TEACHER. Please state curriculum interests. Closing date: 15th May 1987. £18080

BOLTHULL
EDUCATION COMMITTEE
SCHOOL
1987. A SCALE 2 TEACHER
Required for September 1987. A SCALE 2 TEACHER. Please state curriculum interests. Closing date: 15th May 1987. £18080

STOCKPORT
EDUCATION COMMITTEE
SCHOOL
1987. A SCALE 2 TEACHER
Required for September 1987. A SCALE 2 TEACHER. Please state curriculum interests. Closing date: 15th May 1987. £18080

STOCKPORT
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GUFFOLK COUNTY COUNCIL continued

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PRIMARY AND SPECIAL SCHOOLS NEWLY QUALIFIED TEACHERS

FOR SEPTEMBER 1987

The London Borough of Havering is seeking to appoint as its former years, first-class NEWLY QUALIFIED Teachers to work mainly in its primary, but also in its special schools (moderate and severe learning difficulties), with effect from 1st September 1987.

Applications are invited from well qualified and enthusiastic teachers who are seeking the opportunity to work for a lively and caring education authority and to play an active role in the education service it provides.

Having offers excellent professional support for its teachers at all stages of their careers, including an average over 100 in-service courses each term. In addition, NEWLY QUALIFIED teachers are released from their teaching commitments for one session per week to enable them to receive special in-service training as part of the support provided for them by the Authority in their probationary period.

Having, one of the largest London Boroughs, a well placed on the edge of the Essex countryside and yet within easy reach of London, and all its facilities, to which there is easy access by public transport, both road and rail.

London Weighting £795 per annum.



Application forms are available (see please) from the Director of Educational Services (Ref. Staffing/NQ), Mercury House, Mercury Gardens, Romford RM1 3DR.

(16601)

PRIMARY EDUCATION continued

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Lancashire County Council

An Equal Opportunities Employer welcoming applications from all sections of the community.

COUNTY UNATTACHED RELIEF TEACHERS (PERMANENT FULL OR PART-TIME POSTS)

Salary: Scale 1/2 (according to qualifications and experience)

7 new posts are available from September, 1987 as part of a team of permanent peripatetic teachers to serve schools in East Lancashire including Blackburn, Burnley, Nelson and Colne and the Rossendale and Hyndburn areas. Scale 2 posts are available for suitably qualified and experienced applicants. Mileage allowances will be paid and car loan facilities will be available in approved cases. The Authority is committed to providing effective support for relief teachers, including professional counselling and access to INSET so as to develop relief teaching as a positive professional opportunity. Applications are invited from qualified teachers with relevant experience in primary education.

Application forms and further details are available from the District Education Officer, at the following addresses:-

Closing date: 21st May 1987

BLACKBURN DISTRICT
1 POST NURSERY/INFANT
JOINT DIVISIONAL OFFICES
JUBILEE STREET, BLACKBURN

HYNDURN DISTRICT
2 POSTS: 1 NURSERY/INFANT, 1 PRIMARY
EDUCATION OFFICES
EWBANK HOUSE, CANNON STREET, ACCRINGTON

BURNLEY DISTRICT
2 POSTS: INFANT/JUNIOR
EDUCATION OFFICES, 14 NICHOLAS STREET, BURNLEY

PENDE DISTRICT
1 POST: NURSERY/INFANT
EDUCATION OFFICES, MARKET STREET, NELSON

ROSSDALE DISTRICT
1 POST PRIMARY
EDUCATION OFFICES, TOWN HALL
LORD STREET, RAWTNSSTALL, ROSSDALE

Haringey

QUALIFIED PRIMARY TEACHERS

"Come and Supply Teach for Us"

Rates of pay
£39.65-£81.28
per day. Paid weekly

Short or long term
placements

Work from one to five
days per week

Limited help with
accommodation

Early interview, fast
placement



Alexandra Palace, Haringey

WE WELCOME APPLICATIONS FROM ALL QUALIFIED TEACHERS AND HAVE OPENINGS AT SECONDARY LEVEL AS WELL.

Ring 01-881 3000 Ext. 3147 for an application form or write to Room 111, 48 Station Road, LONDON N22. Quote Ref:

Haringey is an Equal Opportunities Employer. We wish Haringey's teaching force to reflect society's rich diversity - come and join us.

(16603)

Leicestershire

Please contact the Headteacher for further details and application forms (a.s.a.).

SECONDARY:

DEPUTY HEADSHIP
STONYHILL HIGH SCHOOL, Stonyhill Avenue, Birstall LE4 4JG (11-14) NOR 840.
SECOND MASTER/MISTRESS — Required September. Applications are invited from suitably experienced and qualified teachers.

SENIOR TEACHER

LUTHERWORTH GRAMMAR SCHOOL (14-18), Birstall Rd, Lutworth, Leics. LE17 4EW, NOR 1433.
HEAD OF SCIENCE & CO-ORDINATOR OF TVET — A suitably qualified and experienced teacher required. Person appointed will have the outstanding qualities of leadership necessary to build upon the long established proven success of a working provision in science. Senior Teacher Scale subject to MSC funding.

SCALE 3

BARINGTON COMMUNITY COLLEGE, Braubourne Drive, Beaumont Leys, Leicestershire LE12 1JH, NOR 820.
TECHNOLOGY CO-ORDINATOR — Required for September an experienced and committed teacher to lead a team developing a broad cross technology programme in Years 4 and 5 and technological modules in the Science and Design curricula in Years 1-3. This is a new post and offers an opportunity for someone committed to broad based technology for all students. Subject specialist in not as important as an understanding of the wider disciplinary approach to technology. Scale 3 subject to MSC funding.

HAMILTON SCHOOL, Kayham Lane West, Leicestershire LE5 1RT.
HEAD OF GRAMA — Required September, to take responsibility for the subject throughout the school. Applications are invited from experienced and enthusiastic teachers to take part in TVET extension plans for the 14-16 curriculum, developing drama as a core module for the age range and a teaching method across the curriculum. There will also be an opportunity to teach to GCSE. Scale 3 subject to MSC funding. Closing date: 18th May 1987.

SOAR VALLEY COMMUNITY COLLEGE (11-18), Clemenage Avenue, Leicestershire LE17 4NY, NOR 1173.

MATHS — Required September to teach in the Department to teach across the 11-18 age range up to GCSE level.

LUTHERWORTH SCHOOL (14-18), Birstall Rd, Lutworth, Leics. LE17 4EW, NOR 1433.

HEAD OF RELIGIOUS EDUCATION — Required from September, PE is presently an autonomous course subject for all students in years five and six and is also taught 'A' level. An experienced and enthusiastic teacher is required with imagination and flair to continue the developments within the school in fostering and understanding of Christianity within a positively affirmed multi-faith parable society.

HEAD OF ECONOMICS & POLITICAL & BUSINESS STUDIES IN THE VI FORM — Required September 1987. Scale 4 post will be available to an appropriate qualified and experienced candidate who can combine these responsibilities with those of assistant co-ordinator of TVET, with special responsibilities for business and enterprise education.

SCALE 2

WYGGESTON COLLEGE (11-18), Regent Road, Leicestershire LE1 7JH, NOR 770.
COMMERCIAL SUBJECTS — Required September teacher for commercial subjects to both charge of this well established area and to teach Accounts to GCSE.

ROBERT BAYTH UPPER SCHOOL, Burnmill Road, Market Harborough LE16 7JG, NOR 1180.

HEAD OF TECHNOLOGY — Required for September 1987, an energetic and committed teacher of Technology who will be able to develop the subject from its new basis within the Design Faculty. Technology is offered to GCSE level within the option system and is also available as a choice in Core Science.

The successful candidate will be expected to become involved in the work of the whole faculty and also to liaise with other areas within the School to support and promote the subject of Technology in the curriculum.

SCALE 1/2

ST. MARTIN'S R.C. HIGH SCHOOL (11-14), Stoke Golding, Nuneaton, Warwickshire, NOR 361.

PE/MATHS — Required September. A teacher for boys Physical Education with some Mathematics. Scale 2 available for suitably qualified applicant.

SCALE 1

ASHBY GRAMMAR SCHOOL (14-18), Leicestershire Road, Ashby de la Zouch, Leics. LE19 4JH, NOR 1255.

JUNIOR HOUSE TUTOR — Required for September to assist in a boarding house of 32 boys, attached to the 14-18 upper school.

IVANHOE HIGH SCHOOL (11-14), North Street, Ashby de la Zouch, Leics. LE19 4JH, NOR 840.

DESIGN — Required an enthusiastic and versatile teacher of Design is needed, with an emphasis on an imaginative approach to wood.

LONGBLADDE COLLEGE (14-18), Wansley Lane, Birstall LE4 4JG, NOR 855.

PHYSICS — Required for September, or maybe if possible, a graduate teacher of Physics able to teach the subject to GCSE and A level.

EARL SHILTON COMMUNITY COLLEGE (14-18), Heath Lane, Earl Shilton LE19 7PD, NOR 744.

GERMAN — Required for September a Scale 1 German specialist to teach German to A level and French to at least G.C.E. We are looking for an enthusiastic English teacher who is committed to communicative language teaching and prepared to play a considerable role in the development of new courses.

JOHN CLEVELAND COLLEGE (14-18), Forest View, Bait Lane, Hinckley, Leics. NOR 1855.

INFORMATION TECHNOLOGY & COMPUTING — Required to commence Autumn term 1987. Scale 1 subject to MSC funding.

CHOW HILL COMMUNITY COLLEGE, Overdale Road, Leicestershire LE17 4NY, NOR 874.

CHEMISTRY — Required September Scale 1 teacher of Chemistry and/or Physics to all ages and ability levels in the 11-18 Comprehensive.

OROGRAPHY — Required September an enthusiastic teacher to teach all ages and ability levels in this 11-18 Comprehensive School. Some Social Studies an advantage.

LANCASTER BOYS SCHOOL (11-18), Old Knighton Lane East, Leicestershire LE15 4JH, NOR 825.

PE/REAR — Required as soon as possible a specialist teacher across the 11-18 age range in all boys school, with some Maths in years 1 and 2.

RUSHEY MEAD SCHOOL (11-18), Melton Road, Leicestershire LE17 4TA, NOR 870.

ENGLISH — Required September for the full age and ability range. A keen interest in personal development and a desire to extend the role of the school project including bilingual production will be an advantage.

P.E. AND GAMES — Required September, an enthusiastic committed teacher of P.E. and Games, which are compulsory for years 1-3 and offered as part of an enrichment programme for years 4 and 5. An ability to offer a personal general subject and a willingness to become involved in community work will be an advantage.

SOAR VALLEY COMMUNITY COLLEGE (11-18), Clemenage Avenue, Leicestershire LE17 4NY, NOR 1173.

MATHS — Required September to teach across the 11-18 age range up to GCSE level.

WYGGESTON & QUEEN ELIZABETH COLLEGE (18-19), Regent Road, Leicestershire LE1 7JH, NOR 840.

MATHS/COMPUTER SCIENCE — Graduate required, from September to teach both Mathematics and Computer Science to 'A' level (London exam), O.F.T.E.

LUTHERWORTH GRAMMAR SCHOOL (14-18), Birstall Rd, Lutworth, Leics. LE17 4EW, NOR 1433.

PHYSICAL EDUCATION — Required September, a teacher for Girls, the ability to offer specialist teaching in netball, tennis and dance would be an advantage.

The person appointed will have a committed involvement in the Department's wide range of activities across the full age range.

ROBERT BAYTH UPPER SCHOOL (14-19), Burnmill Road, Market Harborough, Leics. LE16 7JG, NOR 1180.

BUSINESS STUDIES — Required from September to join a low and looking team offering a wide range of courses across the 14 to 18 school. Ability to teach by personalising is essential.

INFORMATION TECHNOLOGY — Required from September to assist with the subject throughout the school. Applications are invited from experienced and enthusiastic teachers to take part in TVET extension plans for the 14-16 curriculum, developing drama as a core module for the age range and a teaching method across the curriculum. There will also be an opportunity to teach to GCSE. Scale 3 subject to MSC funding. Closing date: 18th May 1987.

UPPINGHAM COMMUNITY COLLEGE (14-18), London Road, Uppingham, Leics. LE18 1JH, NOR 435.

PHYSICAL EDUCATION — Required for September an assistant teacher. The ability to offer dance as part of an expressive arts course is desirable.

SOUTH WIGSTON HIGH SCHOOL (10-14), St. Thomas's Road, South Wigston, Leics. LE18 2TA, NOR 785.

GRAMMA DANCE — Required Autumn term 1987, teacher to join a developed department with an excellent reputation.

SPECIAL EDUCATIONAL NEEDS — Required Autumn Term 1987, an experienced sympathetic middle school teacher to join the 10-11-14 team as a form tutor and general subject teacher.

Half of the time table will be spent as a special needs teacher with individuals and small groups on a support/therapeutic basis. Mathematics as a main 'subject' discipline is desirable.

WIGSTON GUTHLAXTON COLLEGE (14-18), Station Road, Wigston Magna, Leicestershire LE18 2DS, NOR 1404.

DANCE — Required September teacher for Dance to GCSE level and to assist with College productions. Tel: Leicestershire 81611. Closing date: 15th May 1987.

PRIMARY

SCALE 2

BRAUNSTONE FRITH INFANT SCHOOL, Liberty Road, Leicestershire LE16 7JG, NOR 1465.

Required September teacher for reception infant class.

Required September teacher for middle or top infant class.

GREEN LANE INFANT SCHOOL, Spenny Hill Road, Leicestershire LE15 4JH, NOR 194.

Required September teacher for multi-cultural development throughout the school. This is Section 1 funded post.

HIGHFIELDS (NEW) PRIMARY SCHOOL, c/o Whitehall Primary School, Whitehall Road, Leicestershire NOR 270.

Required September, experienced Primary School Teacher, Music an advantage.

Required September, experienced, enthusiastic, adaptable primary teacher for this new school.

SPINNEY HILL PRIMARY SCHOOL AND COMMUNITY CENTRE, Wansley Lane, Leicestershire LE15 4JH, NOR 811.

Required September, experienced infant teacher for middle infant age range to join a large multi-cultural primary school, available for a complete replacement to develop creative music teaching and singing throughout the infant department and to liaise with colleagues in developing a sound musical education policy throughout the school.

STOKES WOOD PRIMARY SCHOOL, Blachell Avenue, Leicestershire LE15 4JH, NOR 242.

Required September, teacher with primary experience for the Junior Speech and Language Unit at this school. Scale 2-3-50K.

WYCLIFFE COUNTY PRIMARY SCHOOL, Moorhouse Lane, Walsby, Leicestershire LE15 4JH, NOR 186.

Required September, experienced, well motivated and responsible teacher able to teach effectively and enthusiastically across the primary age range.

THURNSTONE COUNTY PRIMARY SCHOOL, Hensons Lane, Thurnstone, Leicestershire LE15 4JH.

Required an experienced teacher to join lower junior class and be responsible for one or more of the following curriculum areas: Music, Drama and Educational Dance.

ST. PETER & ST. PAUL C.E. SCHOOL (AIDED), Upper Church Street, Spenny Hill, Leicestershire LE15 4JH, NOR 435.

Required September, an experienced and committed teacher prepared to teach across the Primary age range. The successful applicant should be able to make a significant contribution to curriculum development and offer expertise particularly in Music. Communicant Member of Church of England preferred.

GLENNHURST PRIMARY SCHOOL, Erskine Avenue, Wigston, Leics. LE18 2TA, NOR 825.

Required September, experienced and enthusiastic teacher required to take responsibility for curriculum leadership in Maths throughout the school and interest in collaborative approaches to learning.

THE MEADOW PRIMARY SCHOOL & COMMUNITY CENTRE, Meadow Way, Wigston Magna, Leicestershire LE18 2DS, NOR 332.

Required September an enthusiastic and suitably qualified teacher to co-ordinate music throughout the Junior Department of this lively open plan primary school. An interest in Drama would be an additional advantage.

THE PARKLAND COUNTY PRIMARY SCHOOL, St. Thomas's Road, South Wigston, Leicestershire LE18 2TA, NOR 393.

Required September, experienced and enthusiastic teacher required to take a class of infants in an open plan building. Responsible for the development of Science/Technology throughout the school.

SCALE 1/2

BROUGHTON ASTLEY C.E. PRIMARY SCHOOL, Orchard Estate, Broughton Astley, Leicestershire NOR 392.

Required September, an enthusiastic teacher to take middle infant class. Ability to co-ordinate music through the school desirable, but other strengths and interests considered. Scale 2 post may be available.

ST. CLARE'S R.C. (AIDED) PRIMARY SCHOOL, Conest Drive, Coalville, Leics. LE13 4JH, NOR 187.

Required September, a full-time teacher with enthusiasm and commitment for top infant class. Music an advantage. Practising Catholic preferred. (Scale 2 available for music).

BEAUMONT LODGE PRIMARY SCHOOL, Astill Lodge, Beaumont Leys, Leicestershire LE18 1JH, NOR 118.

Required September for this recently opened child-centred school, an enthusiastic innovative teacher with experience of team teaching, to work initially within a team covering a wide 7-11 age range. The post does not necessarily call for specific curriculum strengths (although such strengths should be valued in the selection process) but for a teacher with proven ability to promote good primary practice. The school has a policy of full integration for visually impaired pupils.

QUEENSWOOD INFANT SCHOOL, Wansley Drive, Leicestershire LE15 4JH, NOR 272.

Required September a committed, enthusiastic teacher for this lively open plan school (4 to 10 years). Music is an advantage. Scale 2 post available to suitable applicant.

BROOKSIDE PRIMARY SCHOOL, Copps Cote, Oakby, Leicestershire LE15 4JH, NOR 272.

Required September a committed, enthusiastic teacher for this lively open plan school (4 to 10 years). Music is an advantage. Scale 2 post available to suitable applicant.

ST. LUKES C.E. PRIMARY SCHOOL, Thornby, Leicestershire LE15 4JH, NOR 316.

Required September, teacher for a class of 6-7 year olds. Music and general interest and ability essential. The successful teacher will be expected to liaise with parents and have a strong interest in curriculum development. Also to be involved in the wide ranging activities of the school.

SCALE 1

SPINNEY HILL PRIMARY SCHOOL & COMMUNITY CENTRE, Wansley Lane, Leicestershire LE15 4JH, NOR 811.

Required September, an enthusiastic teacher to work initially with a lower junior (6-8 years) class, but later to be involved with children throughout the primary range. The teacher will be expected to take part in the school's programme of curriculum and staff development and an interest in the extension of language and drama skills would be an advantage, as would the ability to organise P.E. and swimming activities throughout the school.

BEECHWOOD COUNTY INFANT SCHOOL, Overdale Drive, Coalville, Leicestershire LE18 2DS, NOR 227.

Required September, an experienced and enthusiastic infant teacher required to take responsibility for reception and Special Needs. Someone with experience of the Story approach to reading, and also a pianist would be much appreciated.

REVERE COUNTY PRIMARY SCHOOL, Wansley Lane, Birstall, Leicestershire LE15 4JH, NOR 464.

Required September an informed and imaginative infant teacher with a keen interest in child development and a willingness to take an active participation in the life of the school.

STOKES C.E. (CONTROLLED) PRIMARY SCHOOL, Queen's Road, Blaby, Leicestershire LE15 4JH, NOR 285.

Required September, a teacher for juniors, ability to take games desirable.

HILLFIELD COUNTY PRIMARY SCHOOL AND COMMUNITY CENTRE, Hill Road, Beaumont Leys, Leicestershire LE18 2DS, NOR 332.

Required September, teacher with infant training (or appropriate experience) to be responsible for curriculum welfare and day to day management of a vertically grouped infant class.

The post will involve close consultation with and support from Head and Colleagues.

BROOM LEYS COUNTY PRIMARY SCHOOL, Broom Leys Road, Coalville, Leicestershire LE15 4JH, NOR 353.

Required for September, teacher able to take responsibility for boys' games and P.E.

DANMILL PRIMARY SCHOOL, Mill Lane, Enderby, Leics. LE15 4JH, NOR 431.

Required for September — 4 Permanent teachers, for the following vacancies:

(1) Teacher for lower juniors, swimming an advantage.

(2) Infant teacher prepared to take an interest in art and display. Swimming also an advantage.

(3) Infant teacher prepared to take an interest in music. Swimming also an advantage.

(4) Reception teacher, swimming also an advantage.

THE HALL COUNTY JUNIOR SCHOOL, Glenfield Drive, Glenfield, Leicestershire NOR 224.

Required September 1987, an experienced and committed teacher for lower and middle age range. Tel: Leicestershire 87552.

LANGHAM C.E. (C) PRIMARY SCHOOL, Langham, Oakham, Leics. NOR 136.

Required September teacher of infants to teach across the whole primary age range.

CATHERINE INFANT SCHOOL, University Road, Leicestershire LE15 4JH, NOR 285.

Required September two teachers for infant classes. The successful applicant should be prepared to teach any age group in the 4-7 range applicants should also be interested in teaching in a multi-cultural school.

ABBEY PRIMARY SCHOOL, Biss Avenue, Leicestershire LE15 4JH, NOR 332.

Required September, Section 1 teacher for reception infants.

HEATHERBROOK PRIMARY SCHOOL, Ash Hill Lodge Road, Leicestershire LE12 7JA, NOR 287.

Required September, an experienced teacher to work with top junior age range in this open-plan primary school.

IMPERIAL AVENUE INFANTS SCHOOL, Imperial Avenue, Leicestershire LE15 4JH, NOR 181.

Required September teacher for vertically grouped infant class 5-7 year olds in this multi-cultural city school.

INOLEHURST JUNIOR SCHOOL, Ingle Street, Leicestershire LE15 4JH, NOR 304.

Required September two teachers for juniors.

LINCOLN PRIMARY SCHOOL, Headland Road, Leicestershire LE15 4JH, NOR 423.

Two posts — required September.

Post 1: A teacher with imagination and vision. Willingness and ability to teach in a vertically grouped integrated day situation across the whole primary age range preferred. Experience of other teaching an advantage.

Post 2: A fully experienced, enthusiastic, energetic teacher is required to organise a forward looking nursery in this lively multi-cultural school.

THE MEADOW PRIMARY SCHOOL & COMMUNITY CENTRE, 2 Meadow Way, Wigston Magna, Leicestershire LE18 2DS, NOR 332.

Required September 1987 an enthusiastic and suitably qualified teacher to co-ordinate music throughout the Junior Department of this lively open plan primary school. An interest in Drama would be an additional advantage.

MEDWAY JUNIOR SCHOOL, St. Stephens Road, Leicestershire LE15 4JH, NOR 282.

2 Posts. Required September.

Post 1: Part-time (0.5) teacher to provide classroom support for ethnic minority pupils. An ability to speak a community language, especially Bengali, would be an advantage. This is a Section 1 post.

Post 2: Teacher for lower junior class. The successful teacher would be expected to contribute to the wide ranging activities of the school.

MERRYDALE INFANT SCHOOL, Claydon Road, Leicestershire LE15 4JH, NOR 233.

Required September teacher for reception class in this attractive semi-open plan infant school.

MERRYDALE JUNIOR SCHOOL, Claydon Road, Leicestershire LE15 4JH, NOR 336.

Required September teacher for juniors.

BANFIELD CLOSE PRIMARY SCHOOL, Sandfield Close, Leicestershire NOR 441.

Required September, nursery/infant teacher for 4-11 in this modern, open plan multi-cultural school on the edge of the city.

SPINNEY HILL PRIMARY SCHOOL & COMMUNITY CENTRE, Wansley Lane, Leicestershire LE15 4JH, NOR 811.

Required September, three teachers with experience in early education for younger age infant classes initially. Language development a priority. The school in the future will be expected to take part in the school's programme of curriculum and staff development and an interest in the extension of language and drama skills would be an advantage, as would the ability to organise P.E. and swimming activities throughout the school.

Required September, teacher with enthusiasm, initiative and energy for 3rd year juniors initially. Ability to play musical instrument and interest in being involved in the multi-cultural musical activities that take place would be an advantage, as would ability to teach swimming also.

ROLLESTON INFANT SCHOOL, Hillsborough Road, Leicestershire LE15 4JH, NOR 185.

Required September, teacher for reception infant class.

THORNEY LODGE PRIMARY SCHOOL, Dudley Avenue, Leicestershire LE15 4JH, NOR 279.

Required September an enthusiastic teacher for either top infant/primary juniors or reception class, nursery experience would be an advantage.

UPLANDS INFANT SCHOOL, Melbourne Road, Leicestershire LE15 4JH, NOR 280.

Required September, an enthusiastic infant teacher for this new city, multi-cultural school.

WHITEHALL PRIMARY SCHOOL, Whitehall Road, Leicestershire LE15 4JH, NOR 306.

Required September, a lively, enthusiastic and committed primary teacher. Experience in the field of Science and Technology is sought and essential in Physical Education or Music would be an advantage.

WELSHY HOUSE PRIMARY SCHOOL, Beaumont Leys Lane, Leicestershire LE15 4JH, NOR 346.

Required September an enthusiastic and committed teacher for reception infants.

WYVERN INFANT SCHOOL, Wyvern Avenue, Leicestershire LE15 4JH, NOR 283.

Required September a lively and enthusiastic teacher with infant/nursery training and/or experience to be in charge of a 30 place Nursery which is part of a large Nursery department. The ability to work as part of a team committed to the principles of early childhood education is essential as is commitment to Multi-Cultural Education. An interest in developing strategies to encourage and extend Home-School links would be an advantage as would the ability to speak Gujarati/Punjabi. Full-time or part-time posts available.

HOLYWELL COUNTY PRIMARY SCHOOL, Thinsmere Drive, Loughborough LE11 3JA, NOR 245.

Required September, teacher for vertically grouped infant class (with 'twinning' lines).

SACRED HEART R.C. (AIDED) PRIMARY SCHOOL, Grey Street, Loughborough LE11 3JZ.

Required September, enthusiastic and versatile reception infant class teacher to co-operate in reorganisation. Practising Catholic with Catholic Teacher certificate preferred. Music an advantage.

MARKET HARBOUROUGH C.E. PRIMARY SCHOOL, 1 Fairfield Road, Market Harborough LE16 9QH, NOR 340.

Required September, Junior/Infant class teacher. Willingness to be involved with the school's wide ranging activities and to take an active part in the life of the school. Full-time or part-time posts available. Please send additional areas of interest that would be relevant for the post.

Leicestershire

Please contact the Headteacher for further details and application forms (a.s.a.).

PRIMARY

CHR

THE TIMES EDUCATIONAL SUPPLEMENT 8.5.87

Mathematics

The majority of mathematics teachers have for some time needed little convincing about the poverty of an approach which has largely depended on the possession of a stick of chalk and a loud voice for its effectiveness. Coe Croft

Thoughts on the changing status of school mathematics

Clues without solutions

The majority of mathematics teachers have for some time needed little convincing about the poverty of an approach which has largely depended on the possession of a stick of chalk and a loud voice for its effectiveness. Coe Croft

Thoughts on the changing status of school mathematics

Clues without solutions

suggested a re-appraisal of both the content and methodology of the

mathematics curriculum for clientele no longer willing to be coaxed into submissive acquiescence by the prom-

use of more fertile employment possibilities. Things were changing and many felt that the now GCSE assessment techniques would provide a non-approach left the teacher unable to sensibly address the whole class, or even groups within it, and pupils were denied the opportunity of consulting and glue. Some questions and further lines of enquiry developed as the initial problem neared solution and sub-merged from view:

(i) Why "square" cuts from the corners? What other shapes will do?

(ii) How can you evaluate the area of the remaining figure?

He seemed somewhat perplexed that the table of values could, in some way, be related to a worthwhile extension of anything from the table.

approaches which stimulated enthusiasm and mobilized mathematical ability, awareness and confidence. It was self-evident that this could be inconsistent with some traditional notions of the problem in hand. We gravitated towards the possibility of an even bigger "Box-Volume" for a non-integer square cut and thence the volume when nothing at all has been removed? (See Fig 2 below)

(iv) What if the containers needed tops as well?

It is important to recognize that this is an approach not merely rostering the unusual or "investigative".

He thought he ought to try and find a way to make the problem of 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 83

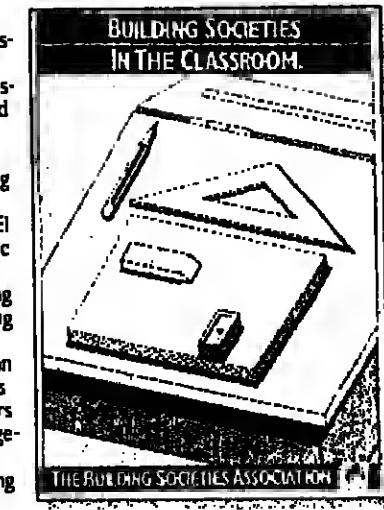
period of intensive practice. Rather, an approach was required which would offer students a regular practical and interactive experience – the “clues” of the title – leading to the balked because “I’ve not been shown how to work out problems like that”. When I asked him how he’d produced the values in the table he squeezed his

development of owned "solutions" or "results" capable of being applied in a variety of appropriate circumstances. Some time ago I talked to a 15-year-old boy, aimed his forehead at the heavens and relied on incantation: "You double the number, take it from 20, times it by itself and times it by the first number you had," but was

student who was working on a problem called "MaxBox". This involved him in calculating the various volumes of the open box formed when

THE BUILDING SOCIETIES ASSOCIATION

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2. TYPE OF VESSEL
3. HOME PORT
4. DATE OF DEPARTURE
5. DATE OF RETURN
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236. NAME OF TWO HUNDRED AND NINETEEN
237. NAME OF TWO HUNDRED AND TWENTY
238. NAME OF TWO HUNDRED AND TWENTY-ONE
239. NAME OF TWO HUNDRED AND TWENTY-TWO
240. NAME OF TWO HUNDRED AND TWENTY-THREE
241. NAME OF TWO HUNDRED AND TWENTY-FOUR
242. NAME OF TWO HUNDRED AND TWENTY-FIVE
243. NAME OF TWO HUNDRED AND TWENTY-SIX
244. NAME OF TWO HUNDRED AND TWENTY-SEVEN
245. NAME OF TWO HUNDRED AND TWENTY-EIGHT
246. NAME OF TWO HUNDRED AND TWENTY-NINE
247. NAME OF TWO HUNDRED AND THIRTY
248. NAME OF TWO HUNDRED AND THIRTY-ONE
249. NAME OF TWO HUNDRED AND THIRTY-TWO
250. NAME OF TWO HUNDRED AND THIRTY-THREE
251. NAME OF TWO HUNDRED AND THIRTY-FOUR
252. NAME OF TWO HUNDRED AND THIRTY-FIVE
253. NAME OF TWO HUNDRED AND THIRTY-SIX
254. NAME OF TWO HUNDRED AND THIRTY-SEVEN



THE BUILDING SOCIETIES ASSOCIATION

continued

This newsletter has been inserted at the expense of the School Mathematics Project and Cambridge University Press to keep teachers and others involved in mathematics education abreast of the Project's activities.

8th May 1987 No.26

smp news

EXAMPLES GALORE!

GRADED EXAMPLES IN MATHEMATICS FOR 11-16 YEAR OLDS



- Revision of Topics for GCSE
- Negative Numbers and Graphs
 - Matrices and Transformations
 - Area and Volume
 - General Arithmetic
 - Fractions and Decimals
 - Algebra
 - Area and Volume
 - General Arithmetic
 - Geometry and Trigonometry
 - Negative Numbers and Graphs
 - Matrices and Transformations
 - Area, Probability and Statistics
 - Revision of Topics for GCSE

NEW BOOKS for 'A' LEVEL

Pure Mathematics

Statistics

Mechanics

Pure Mathematics

Statistics

Mechanics

Pure Mathematics

Statistics

Mechanics

Pure Mathematics

Statistics

Mechanics

Pure Mathematics

Statistics

Mechanics

Pure Mathematics

Statistics

Mechanics

New thrust

Mathematics Volume 1: Pure Mathematics. By I Dawh. Penguin Masterstudies £3.95. 0 14 077 107 7. Examination Mathematics 1. By J Gilespie. Pan Breakthrough series £3.95. 0 330 29120 3.

There may be deep philosophical as well as economic reasons encouraging leading paperback publishers to produce textbooks. Some surprise could, nevertheless, be evoked by the arrival of two specialist mathematical works, but there is a long tradition of lists with a general educational flavour.

Indeed, the account that marked the 21st anniversary, in 1956, of the advent of Penguin books was emphatic that one of the primary objectives of the firm was "building up a comprehensive Popular Education". The reputation of Pelicans, already at a high peak then, has been maintained, and other series specifically for schools and colleges have been established from time to time.

Now, however, comes a new thrust. Masterstudies, designed as "stimulating companions in coursework and revision of advanced level". In the context of the first of two volumes on mathematics (and its companion on applied mathematics) advanced is to be interpreted as OCE A level. Here, all the common core material of the various examining boards is comprehensively set out.

Explanations of principles are of an appropriate standard; worked examples are explicitly helpful in their descriptions of techniques and applications; and there are good collections of questions from past papers. A full index of definitions and terms also carries page references, while a detailed contents list and a contents table are other useful aids enabling students working on their own to find their way around the book and to place the different parts of the subject in a proper relationship to one another.

All in all this is a commendable fresh approach to a range of work already well supplied with textbooks. There are few others, though, in the same price-bracket as this Penguin.

The Pan Breakthrough book is, however, also modestly priced, and much can be said in its favour. In volume one "nearly all the topics in syllabuses like RSA Stage 1 and BTEC 1 mathematics are dealt with, while volume two will cover the syllabuses of several popular GCE O level examinations, such as AEB syllabus C, London B361 and JMB syllabus A, as well as several pilot 16-plus syllabuses". It is also stated that the books take "full account of the criteria relating to the new GCSE examinations scheme".

It would be wrong to criticize this

approach as one of "all things to all men", more particularly since the work satisfies my frequently expressed wish to see texts concerned with teaching mathematics as a subject of interest and value, and not designed merely as examiners for an examination.

Moreover, Breakthroughs are published in collaboration with the National Extension College, whose services have contributed to the "learning pattern" of the series. A prime target is obviously the student working on his or her own, or needing an aid to supplement whatever tuition is otherwise available. The explanatory notes, illustrative examples, and step-by-step practice provided, merit high praise.

The reader is addressed directly, and is thus personally involved with the work. There are many phrases of the type "see if you can translate these standard index form numbers into ordinary numbers", or "did that last question put you in a panic?" Good advice abounds, too. "Understanding is more important than speed," and "don't give up if you face problems." This work gives a long way to instil understanding and to help learners to overcome problems.

F W Kellaway

Primes

A Number for your Thoughts. By M E Lines. Adam Hilger £4.95. 0 85274 494 1.

Perfect numbers, primes and pi constitute an alliterative sample of the fascinating concepts about figures that have appealed to many numeric people throughout the ages. Naturally, names such as Pythagoras, Euclid and Fermat appear in this new collection of hypotheses and facts.

But other work also looms large in a review that goes deeper than many of the existing popular accounts of pattern and probability. The "shapely numbers" of the eighteenth century mathematician Edward Waring take their place, as does the remarkable investigation of perfect cubes by a Pennsylvania schoolboy, Richard Myers, as recently as 1970. Infinity and the special base-ten representation of 6174 are other features included to intrigue and stimulate.

Mr Lines is concerned with data and discovery, with historical problems and their solution. Happily, he eschews the speculative byways of, say, biorhythms or astrology. He dwells in facts and concentrates on the mathematics. His book is all the more valuable and appealing in consequence.

FWK

Clues without solutions

continued

thrice weekly trek off to a dimly-lit, refrigerated and porous demountable on the edge of the school campus are numbered. The need to have immediate access to a full range of equipment will mean that the mathematics accommodation should ideally comprise a grouped suite of rooms with complementary sets of materials to avoid wasteful duplication of the more expensive items. Furniture will need to reflect the practical nature of the learning process.

(iii) "Block" timetabling wherever possible would ensure maximum benefit from this grouped accommodation. Shared teaching opportunities continue to provide staff with the most effective stimulus to modifying their current practice. Shared experience is unambiguous. From it derives the most appropriate opportunity for the development of problem-solving and effective staff discussion. Teacher transformations rarely happen in its absence.

(iv) There is a particular need, for smaller classes.

The gradual diminution of the size of some subject option groups at the expense of the major curriculum areas cannot now continue. Now assessment techniques demand an intimate knowledge of each pupil and the developing practical status of the subject evokes the intellectual level of the

guarantee practical subjects advantageous staffing. Experience suggests that between 20 and 25 is the optimum size for the secondary class. The use of equipment, the promotion of discussion, the effective assessment of school-based work will scarcely blossom with groups any larger. Neither will sensitive mathematics teaching, if staff continue to be confronted with large groups, increasing pressures and diminishing resources.

Staff have no wish merely to act as the postmen of the new experience - disseminating previously selected parcels of content but lacking the opportunity to interpose their sensitivity. The teachers are the most crucial resource. They require a supportive working environment more consistent with colleagues in other practical areas of the curriculum.

A national consequence of this might be a resurgence of the energy, commitment and enthusiasm which would prevent droves of relatively underpaid and over-burdened mathematics teachers seeking a future with the Tax Inspectorate or careers involving the manipulation of inanimate computer keys. It might, once again, naturally attract the high flier looking for a fascinating, rewarding and enjoyable career and create classrooms across the nation of talented and successful students benefiting from their mathematical studies.

I believe our children demand and deserve nothing less.

Board based

GCSE Maths - Higher Level. By Jean Holderness. Causeway Press £5.95. 0946 183 341. GCSE Maths - Intermediate Level. By Jean Holderness. Causeway Press £5.95. 0946 183 333. Mathematics for GCSE: Book 1. By David Rayner. Oxford University Press £3.50. 0 19 914245 9.

GCSE Maths - Higher Level and GCSE Maths - Intermediate Level by Jean Holderness are the first two of three books designed to cover the three levels of a GCSE mathematics course. The Foundation Level will be published later in the year. Each book is independent of the others and contains the whole of a one or two year course leading to the appropriate level of GCSE. They are based on the syllabuses of the four English examination boards plus the Welsh and Northern Ireland boards as published for use in 1988. At the beginning of the two volumes to hand there is a table listing those chapters in the book which contain topics not needed by a particular board. The books have a full-page format and are clearly printed, though the pages are full which is to be expected if the whole course is to be completely covered in a single volume of reasonable compass. The illustrations relate strictly to the text and are black and white line drawings.

The Intermediate and Higher Level books follow the same pattern. Each starts with a short section addressed to the teacher and the Intermediate volume points out that the work follows the same order as the Higher Level book so that students will be able to transfer between courses. There is also a section at the beginning for students called "Learning Mathematics" which is the first of six sections directly addressed to them giving sound advice on "Independent work", "Improving your work", "Making plans for revision", "Learning formulae and practice exams" and "The examination". The first five chapters of each book contains work that the pupils will have already covered, the intention being to "review and consolidate the learning of former years".

Decimals are not introduced until chapter five; this is done "to encourage more practice in mental arithmetic and in using fractions". Pupils are expected to have calculators though the author warns the teacher that "there is a danger on relying on them too much, and mental arithmetic suffers, so try to keep a balance".

After every five chapters there is a miscellaneous section which contains aural practice, a multi-choice exercise, revision exercises and suggestions for practical work and investigations. At the end of each chapter there are puzzles, for example, the Tower of Hanoi, replacing missing figures in calculations and replacing letters with numbers. Answers to the puzzles are not given on the grounds that their value would be lost "if the answers were too readily available". This will be a source of frustration to some.

The author also tells the student that the sections are "clearly headed Puzzles so that you know that they are not part of your examination course".

Considering the need at this level to begin with a section on checking multiplication tables and on exercise on the "four rules" with whole numbers. This fits ill with the admonition at the end of the student's section on the opposite page to "get started and enjoy your Maths". Worked examples are given throughout the text but no proofs are offered of general results. For example, the quadratic equation formula is stated and then used in a worked example but no indication is given as to the derivation of the formula. Some teachers might take

altogether which surely for Higher Level pupils would be indefensible. There are plenty of examples for the students to do and many suggestions for practical work and investigations - my house, pascals triangle, curves of pursuit and even the nine point circle which will bring back memories for some. The book appears to cover all the topics that would be needed at this level.

Intermediate Level has, beside the list of chapters at the beginning, a list of "Topics for Practical Work and Investigations" which is not included at the Higher Level. This is a very practical improvement. The Intermediate Level book starts to differ from its Higher Level counterpart at the end of chapter five where the percentages, profit and loss, simple and compound interest are moved to separate, later chapter. Many of the puzzles, practical work and investigations are the same as the Higher Level book. Nevertheless, it would be a mistake to think the two books interchangeable since there are obviously fewer topics in the Intermediate Level book. Where the books do have topics in common I could not detect a difference in treatment, the language used, for example, was the same; in fact in trigonometry the pages on the sine, cosine and tangent ratio were identical.

Altogether these are a sound, thorough and workmanlike text which have the feel of a traditional text with the aural tests, practical work, investigations and puzzles added in. In the hands of a teacher prepared to make up the deficiencies in terms of explanations as opposed to worked examples these are good examination books.

Mathematics for GCSE Book 1 is the first of a two-book course to be used in the two or three years preceding the examination. There will also be a teacher's book to complete the set. The books are to cover all the topics in List 1 and 2 of the National Curriculum syllabuses of the four English examining groups and of the Welsh joint Education Committee. Book 1 is printed mainly in a double column format and without colour; there are line drawings relevant to the text and line drawings; there are also cartoons at each chapter heading which have some connection with the text. The books are intended for "the majority of secondary school pupils attending the GCSE in mathematics".

The GCSE in mathematics is a difficult and are graded in difficulty but without any other indication of their level. Each exercise is preceded by one or more worked examples but with very little or no supporting text. There are plenty of questions for the children to answer, for example, there are two exercises on collecting like terms which have 70 questions between them.

Book 1 has three sections called "Think about it" which contain "projects", for example, percentages and the Tower of Hanoi (see p. 11). There is a section with 11 mental arithmetic tests which are to be read out to the children. These tests are printed in the books so that the children may check their work afterwards. Book 1 is a collection of exercises which needs to be used with a teacher. Rules are stated without explanation, for example "Multiplying and dividing with negative numbers" and "When the signs are the same, the answer is positive. (b) When the signs are different, the answer is negative."

This seems a sad reflection that textbooks in the Sixties might like to comment upon the idea of detailed commentaries being available, which could be photocopied and distributed to pupils if and when the teacher feels this to be appropriate.

SMP 11-16

Development Officer Appointed

The SMP has appointed a second development officer. He is Mr Tooy Burghall, currently Head of Mathematics at Woodbridge High School in Essex and co-ordinator of the Redbridge User Group.

Mr Burghall was born in Chester, educated at Yorkshire and at Newcastle University, and has previously worked in Manchester and Derbyshire. He will be based in Sheffield and starts with SMP on 1 September.

Graduated Assessment Scheme

There are now nearly 800 Accredited teachers for this scheme and about 600 schools have entered candidates for 1988, the first fully operational year.

SMP, through the Midland Examining Group, has made a formal proposal to the Secondary Examinations Council to link the Graduated Assessment Scheme with the Foundation level of GCSE. Work on this proposal is going ahead as rapidly as possible.

SMP 11-16 National Courses

General Course
Leicester University 6-10 July 1987

Accreditation Course
Leicester University 6-8 July 1987

The general course has been designed to cover a variety of in-service needs. The first half of the course (from Monday lunchtime to Wednesday lunchtime) will concentrate on Years 1 and 2; the second half (from Wednesday lunchtime to Friday lunchtime) will concentrate on Years 3, 4 and 5.

It is possible to attend either or both halves. The second half could be attended after the Accreditation course.

For further details and application forms write to the SMP Office.



A pupil at Woodton Comprehensive School taking a Stage 1 Practical test

SMP 16-19

Early developments

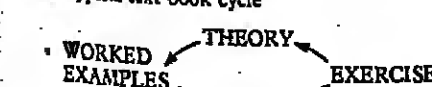
SMP 16-19 is a long-term project to reform sixth-form mathematics. It is of considerable importance for our future as an advanced industrial nation that the accessibility of A-level mathematics courses should be greatly increased.

Working groups have already been constituted in the areas of Case-studies/comprehensions, Mechanics, Statistics, Calculus, Graph-sketching and Functions. In addition, valuable links are being forged with other groups involved in curriculum development in the sixth form.

Currently, over fifty teachers are actively involved in regular group meetings and many more are peripherally involved with the project. Very brief comments on just a few of the issues being discussed in these groups are given in these columns.

Format of material

The typical text book cycle



It is certainly not envisaged for SMP 16-19. A variety of approaches will be used, but a typical pattern might be to develop theory in the drawing together of various pupil experiences, the whole topic area having been introduced by means of a realistic problem. The traditional worked examples and exercises would then form part of an applications section.

The experience would include such things as practicals, investigations and case-studies. The provision, or otherwise, of full commentaries for these has a bearing upon perceptions of the teacher's role. Readers might like to comment upon the idea of detailed commentaries being available, which could be photocopied and distributed to pupils if and when the teacher feels this to be appropriate.

Content and assessment

The coursework aspects of SMP 16-19 will be integrated into the course and will be largely geared to syllabus content. Nevertheless, considerably greater time will be spent on developing topics than is typically the case at present. An important task for each of the initial working groups is to carefully assess the teaching time needed for a thorough treatment of their material.

Every effort will be taken to ensure that the SMP 16-19 syllabus is not so full as to frustrate our aim of facilitating changes in sixth-form learning styles! It is similarly crucial that methods of assessment should also fully support this aim. What forms of assessment do you wish to see being developed within SMP 16-19?

Leicester conference

The University of Leicester School of Education, in conjunction with the School Mathematics Project, is organising a conference from 24-26 July 1987 on A-level mathematics. This meeting will provide a forum for debate concerning aims and content, before SMP 16-19 becomes committed to any one course of action.

Most residential places have now been filled but teachers in the Leicester area can obtain further information from Mrs Susan Hemmings, University of Leicester School of Education, 21 University Road, Leicester, LE1 7RF. Telephone 0533 523717 between 9.30 am and 2.30 pm.

Any comments on A-level reform should be sent to the Project Director, Stan Dolan, at the SMP Office.

Twenty-fifth anniversary

SMP celebrated its first 25 years with a buffet lunch in London in October 1986. About 200 guests attended, including three of the original four founders (see photo) and over 150 of the teachers who have contributed to the Project over the years.

The SMP has published *Challenges and responses in mathematics*, edited by Geoffrey Howson, to celebrate its silver jubilee. This volume of essays on different aspects of SMP's work should be of interest to all concerned with curriculum development. (It is available from Cambridge University Press, price £5.95, ISBN 0 521 33556 6.)



Left to right: Dr Margot Gandy, Sir Bryan Thwaites and Douglas Quaidling (Tom Jones was unable to attend)

SMP Limited Grade A-level

SMP is proposing the idea of a limited grade A-level in mathematics. The proposal, which has been circulated to all centres who are entering candidates for SMP A-level, is to offer a reduced syllabus, consisting of approximately 80% of the full syllabus, but including the Innerboard A-level core. Candidates for the 'limited grade' candidates, but as alternative Paper 2, in which D grade candidates will be expected to score over 60% of the marks available.

Unlike AS level, it will be possible to teach students for this syllabus together with students of the full A-level syllabus, as decisions on the level of entry can be deferred until well into the second year in the sixth form. The aim is to provide an assessment for D and E candidates which, unlike the present A-level, gives them the opportunity to demonstrate what they know and can achieve in mathematics, and consequently encourage more to last the A-level course.

Did you know that over 70% of the students who gain a B grade at O-level get a D, E or Fail at A-level - and we all know what that means in terms of marks achieved in the final examinations! No wonder pupils lose faith in their ability to do mathematics.

Full details of this proposal are available from the SMP Office, on receipt of a stamped addressed A5 envelope.

Project Grants 1987

SMP Project Grants have been awarded to Southway School, Plymouth, for the development of a profiling scheme based on SMP 11-16, and to Meols Cop High School, Southport, for development of low attainers' material.

Applications for grants for 1988 should be submitted by December of this year.

MEG SMP Mode 2 Coursework Option

About 25 schools have entered candidates for this option in 1988. In March, SMP held a series of regional in-service meetings for these schools, and for schools known to be entering candidates in 1989. Further meetings are planned. It is also hoped to produce a newsletter and an INSET pack based on the experiences of schools so far.

The assessment form for projects has been revised, and is now accompanied by a more comprehensive teacher's guide. Copies can be obtained from the SMP Office on receipt of a stamped addressed A5 envelope.

The most experimental feature of the scheme is oral testing in the form of one-to-one interviews. The first operational test is in the process of development, and will be sent to schools by MEG this summer.

Forthcoming publications

SMP New Numbered Books

New Book 2 Part 1 June 1987
New Book 2 Part 2 late 1987

SMP 11-16

Book Y5
Teacher's Guide to Y5 May 1987
Book R3 June 1987
Teacher's Guide to R3 June 1987
Book B5 July 1987
Teacher's Guide to B5 August 1987
Book G7 July 1987
Teacher's Guide to G7 August 1987
Book G8 late 1987
Teacher's Guide to G8 late 1987
Worksheet Masters for: Books B5, R3 and Y5 May 1987
Books G7 and G8 July 1987

Further Mathematics series

Statistics and Probability May 1987
Linear Algebra and Geometry early 1988

Useful Addresses

For general enquiries and GCE syllabuses: SMP Office, University of Southampton, SOUTHAMPTON SO9 5NH. Tel: 0703 559122 ext 3686

For past GCE examination papers: Oxford and Cambridge Board, Elfield Way, OXFORD OX2 8EP. Tel: 0865 54421

For GCSE enquiries: Contact either your local board or University of Cambridge Local Examinations Syndicate, Syndicate Buildings, 1 Hills Road, CAMBRIDGE CB2 2RU. Tel: 0223 61111

For information on GCE entry and the Graduated Assessment Scheme: Oxford and Cambridge Board, 10 Triumphant Street, CAMBRIDGE CB2 1QB. Tel: 0223 64326

For details of SMP publications: Cambridge University Press, The Edinburgh Building, Shaftesbury Road, CAMBRIDGE CB2 2RU. Tel: 0223 312393

EXTRA



The curriculum playground is a very competitive place Too much for too long?

DAVID PLAYFOOT

... the content of many maths syllabuses could be reduced to allow more time for 'fundamentals'. At the same time the mathematics taught through other subjects should be investigated. This short extract from the lead article in *The TES* of April 3 refers to a report concerning the entry requirements for maths degree courses. To me it was a glimmer of recognition of state of affairs that many of us who teach maths have recognized for some time.

Among the many uncertainties and conflicting claims about education today one thing is for sure: the maths curriculum has expanded in terms of content, skills, concepts and facts. I well remember working on translation vectors with a bright group of 11-year-olds and wondering at what stage of my own rather and academic education I had arrived at this concept; probably when I was about 15! Parents who are fortunate enough to attend a "maths evening" at their child's school are invariably amazed at the scope and level of development of the maths curriculum.

Unfortunately this is not such good news as it sounds: HMI reports on primary and middle schools and research into attitudes to maths show another side of the coin. The Cockcroft Report, referring to a relatively recent study, said, "The extent to which the need to undertake even an apparently simple and straightforward piece of mathematics could induce feelings of anxiety, helplessness, fear and even guilt was, perhaps, the most striking feature of the study."

The great expansion does not appear to be working very well. Why not? One reason is the fact that it has not happened alone. Alongside the maths, we in primary and middle schools have seen increasing demands made upon time and resources in many other curriculum areas: science, computer studies, social and political education (what we used to call "projects"), CDT and so on. The curriculum playground has become a very competitive place. To add to the fray we have the strange paradox of the HMI proposing "Areas of Experience" with the emphasis on cross-curricular links as a model of curriculum and then sending us a series of booklets which divide things up into everything from Home Economics to Mathematics - all of these applicable for the five to 16 age-range!

A second reason is the often unattainable models set by many schemes

of work, published maths schemes and specialist advisers and inspectors. All too frequently the assumption seems to be made that teachers have an infinite amount of time to spend on developing their pupils' maths ability. Cockcroft, with admirable restraint, suggests between four and five hours specifically allocated to maths teaching in the primary school; what about all the other maths that arises or is planned in other subject areas? Sorry, that's not included. It is worth looking at your own time allocation and after taking off assemblies, TV programmes, a trip to the swimming pool, language development, art and craft etc etc one does begin to wonder how to fit it all in.

Mathematics from 5 to 16, one of the little booklets I referred to earlier, meets this problem head on with one of the most crucial statements on maths teaching for a long time: "The mathematics syllabus should be reduced for the majority of pupils and re-designed in order that they may cover it thoroughly with useful activities at each stage."

If we accept the need for some reduction for most of our pupils where do we start and what do we leave out? It is perhaps useful to start with some sort of overview of what we want maths to give our pupils. There are any number of lists of objectives and aims set out in recent publications, my particular favourite is in *Mathematics 3 - 11 A Handbook of Suggestions*. These are very detailed and I would suggest that the important ones come under the following four headings:

1. Communication
2. Maths for use as a life skill
3. Maths for fun
4. Confidence in maths

These are not, of course, discrete times and often to the reality of the classroom they will overlap.

If we start by seeing what we wish to communicate using maths it becomes very apparent that some areas of the conventional curriculum are already redundant. For example, to communicate the results of any given survey one may need a variety of skills and concepts but division of vulgar fractions is unlikely to be one of them! Relating maths to some sort of reality which is understandable to the child leads inevitably to a content that is more manageable. The increasing

use of calculators in the primary school is, quite rightly, undermining the need for the dulling repetition of pages of "sums".

Although technological change makes forecasting maths needs for the future a risky game some conceptual ideas are constants - that's one of the joys of maths. We should, therefore, be able to sort out the kinds of maths life skills children will require in the year 2000. Not only the areas (number, shape, measurement and graphical representation are enough to be going on with) but more importantly how deeply to go into each area. I would suggest that the increasing use of computers and calculators will diminish the amount of time spent on numeracy.

The enormous fun element in maths must not be squeezed out in the distillation process; it is a vital ingredient and an important aid to improving attitudes. It also helps in achieving the fourth aim of giving people confidence in maths. Here we can make a start by omitting much that is irrelevant to children's needs and experience and by developing an investigatory approach and using problem solving techniques which encourage thinking, support decision making and avoid closed answers for at least some of the time.

The present published maths schemes do little to help us in building such a framework, looking as they do over their shoulder at the "return to basics" lobby and by trying to be all things to all primary teachers. On the other hand the reality is that most schools lack the expertise, graphic designers and time to successfully devise their own schemes and materials, and carefully chosen published material often gives a vital spine of continuity to a school's maths programme.

What we need is a balance between what is acceptable and perceived as important to parents and governors, and the understandings of teachers and academics who have been researching and teaching maths for many years. Such an approach would hopefully include relevance, creative thinking and the enjoyment of pursuing problems to a conclusion. As the certainty of a central curriculum lurches towards us these issues become more and more academic.

David Playfoot is headteacher at Upland Middle School, Sudbury, Suffolk.



Twisters

Mind Benders: Games of Shape, By I. Moscovitch, Penguin £2.95, 0 14 009825 9
Mind Benders: Games of Chance, By I. Moscovitch, Penguin £2.95, 0 14 009824 0
Solving Place Puzzles, By L.E. Hordern, Oxford University Press £15, 0 19 853204 0

While the principles of many of the puzzles in the pair of *Mind Benders* are traditionally familiar, there are novel twists and settings which add an attractive touch. The fun aspect is prominent throughout. "Thinking is what it is all about: comprehension is at least as important as visual perception or mathematical knowledge" writes the compiler. He recommends a "common-sense practical approach" coupled with some logic and persistence. Certainly the problems generally require a little effort (sometimes more than that) but, for those who are ultimately defeated, solutions are provided in the final quarter of each book. Representative of the contents are: patterns, arrangements of cubes or tiles, routes, distortions and transformations in the first book, and magic numbers, arrays of coins, logistics and probabilities in the other. The presentation is ingenious and colourful, and the whole should enliven and divert youngsters of all ages.

The young in heart will also enjoy the scholarly additions to the Oxford Recreations in Mathematics series. The manipulation of a set of blocks to meet a specified definition of format (often in a predetermined minimum of moves) has long been the basis of a variety of parlour games, elementary or complex.

Edward Hordern has collected the history of such puzzles alongside a collection of examples, and a splendid bibliography and set of references. It appears that Rubik's 4-century ago, a small square box containing 15 little

square numbered blocks of wood interlocked, and exasperated, the world in the way that Rubik's cube was to do in more recent times. The box had space for 16 blocks, so obviously one sector was empty. Starting with numbers one to 15 in a regular numerical order, the solver had to place them one at a time until they were in the proper sequence, one to four in the top row down to 13 to 15 and a blank space in the bottom.

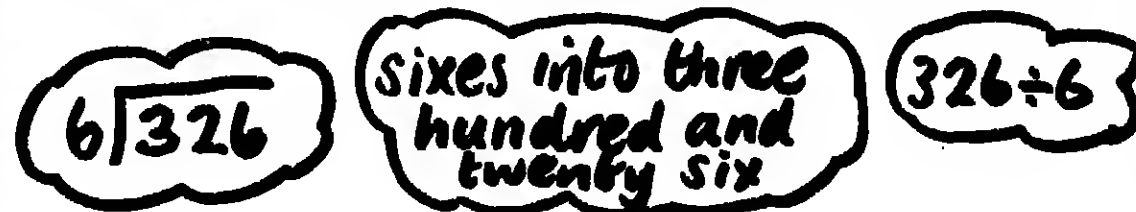
Variants on that theme have abounded ever since, and this book incorporates nearly 300 of them. Puzzles with uniform pieces, others with nonconvex pieces, some involving rotations in three dimensional settings and "railway shunting" exercises are a selection of the types described. An envelope contains patterned pieces which can be used to set up the puzzles. Happy solutions are also provided. This is a remarkable work, combining erudition and entertainment.

F W Kellaway

EXTRA

At least they wrote it somewhere!

The right tools for the job



IAN SUGARMAN

"You put the 'remainder 2' there" "6 goes into 6 one, and you put the one over the ..."

At the point where they finally produced the incorrect answer "51 remainder 2" their teacher invited them to consider what apparatus might be of help. Significantly, while engaged in the fruitless attempts to recall the magic routine that avenue had not occurred to them.

The method then chosen, of laying Cuisenaire rods to the length of 326 and then counting the number of "six" rods needed to make that length, enabled them to discover the correct answer. Clearly, this rather long-winded approach is one that is not easily transportable. But at least it was "there" and was based upon their thinking about the composition of the two numbers concerned and the operation required to relate them. It also offered their teacher a practical means of helping them to develop the imagery necessary for a purely mental approach that is not dependent upon the memorization of a particular sequence of marks made by pencil on paper.

Much lip service has been paid to the need to build the foundations of mathematical thinking upon the manipulation of structured and non-structured equipment. Yet, my own observations and those of many other mathematics support teachers in other I.E.S.s with whom I have come into contact, leads me to believe that all too often, such equipment either simply does not exist in schools or has been consigned to the cupboard until it is brought out for some specific remedial purpose.

Many schools are now suffering the legacy of many years' starvation of funds. Following the visit of an advisory teacher, it is the rule rather than the exception that a school is left with a recommended shopping list of essential items of equipment that runs into several hundreds of pounds. The situation has only been exacerbated by the proliferation of commercial mathematics schemes which are enormously expensive and whose purchase has tended to take priority over the provision of suitable equipment. Sadly, the only contact most children have had with essential items of mathematical equipment is through the drawings and photographs of them on the pages of their scheme book or worksheet. Perhaps we should not be too surprised when today's primary schoolchildren seem to share their parents' view, that mathematics is "doing sums".

As I see it, the alternative to teaching children how to do sums is to offer them encouragement at the very earliest opportunity, to continue to develop their own informal, non-standard methods of computation. Faced with a "sum" for which they have not been taught a standardized routine for its solution, young children will often spontaneously generate a strategy based upon the present state of their awareness of the structure of number. Unfortunately, for those children who have been denied the opportunity to explore pattern and relationships in number they have only been offered no awareness that big numbers are just accumulations of "ones", and their non-standard methods are often long-winded and fraught with the possibility of multiple errors. Occasionally, through the natural inventiveness and creativity which, I believe, lies undetected or under utilized (and frequently crushed) at school, asserts itself, allowing children to use their understanding rather than their memory, and then apply it in a new situation.

The School Curriculum Development Committee Prime Project is now engaged in monitoring the efforts of schools who have agreed to dispense with the teaching of specific standardized pencil and paper methods of calculation and offer children (from six years-old) free access to calculators. Those people who have long been arguing for a more open approach to the teaching of mathematics which fully acknowledges the inherently creative nature of mathematical activity, welcome the pocket calculator for two main reasons. It is both a liberating force and a revolutionary teaching aid. Not only does it free children from the need to spend large amounts of time memorizing and practising specific pencil and paper algorithms but it offers teachers a tremendously effective means of enabling children to carry out investigations into the structure of number. From this is gained a deeper understanding of mathematical processes but is also an activity enjoyable in its own right.

The availability of the pocket calculator together with the re-emphasis upon the vital role of structured apparatus such as Cuisenaire rods and Dienes blocks in helping to develop children's use of number bonds and relationships and their knowledge of place value will enable them, in response to 6326 to:

produce an estimate of "about 50"; realize that this approximation is more than half way to giving them the exact answer; interpret the number the calculator offers as the answer - 54,333,333.

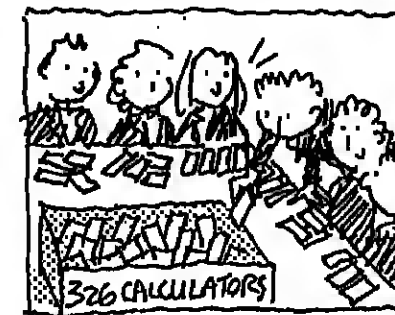
Ian Sugarmán is an Education Support Grant advisory teacher for Primary Mathematics, Shropshire.

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EXTRA

Turtle power

Turtle Geometry: the computer as a medium for exploring mathematics. By Harold Abelson and Andrea diSessa. MIT Press £10.95, 0 262 51037 5.

The increasing popularity of Logo as a programming language undoubtedly derives from the Turtle as much as from its power as a means of expressing computational ideas.

The notion of an object with only two essential components—its position and its heading—and the means to alter them (by moving FORWARD or RIGHT) endows the environment with a simplicity that has appealed to educationalists concerned with learners of all ages and from a variety of disciplines.

This simplicity has given rise to one of the many myths of Logo, namely that Turtle Geometry is essentially trivial (and incidentally, to a second—trivial non-trivial applications of Logo must be non-geometric). This book is a devastating assault on both fallacies. It is, as the authors say in their preface, "a computer-based introduction to geometry and advanced mathematics at the high school or undergraduate level".

It begins with the definition of a square, and ends with a simulation of general relativity. Yet despite its heavy conclusion, there is much in the first third of the book to interest pupils and teachers in secondary (and even primary) schools. There is a wealth of exploratory mathematics (the subtitle of the book is well-chosen) programs and theorems which offer the reader the now-familiar polygons, spirals and snowflakes; models of interacting turtles; a comparison of turtle and coordinate representations for drawing both two and three-dimensional figures; and an elegant treatment of introductory topology.

Later chapters are based on the turtle's liberation from the flat plane, and present a fascinating turtle-based view of the geometry and topology of curved surfaces. Here there is a rich treasure-trove of mathematical ideas to explore which transcend the purely geometric (eg group theory). Finally, these ideas are brought together in a computer program which simulates the



"Enlargement and reduction" are among the topics in Book B4 of the SMP 11-16 series published by CUP at £2.50 (0 521 31469 0), Teachers Book £2.25 (0 521 31466 6).

behaviour of objects in a relativistic gravitational field.

This book was written before the availability of Logo on personal computers, although it employs a notation which is sufficiently similar for translation to current implementations to pose no problem.

It is, in any case, not a book about programming—most of the programs are extremely short, and the development and exploration of computer programs serves as a means to a mathematical end.

Some of the ideas in this book are difficult, and will clearly be applied primarily in post-school contexts. Yet by making complex mathematical ideas accessible to experimentation and play, the authors have pointed us all in a direction for the future. Who can predict how the computer might allow 10-year-old children to discover some of the beauty of mathematics presently reserved for the elite?

Richard Noss

Passnotes

Mathematics: A Book of Revision Tests. By I Dowd. Penguin £2.95, 0 14 077032 1.

Complementing other titles in the Penguin Passnotes series, this collection of worked examples, problems, and self-assessment tests covers the normal range of O level, CSE and equivalent examinations. In his introduction, the author suggests that "the only way to learn mathematics is through practice and use".

The detailed solutions to the illustrated examples explain methods and techniques; the multiple-choice and progress test papers are supplied with answers at the back of the book. An indication of attainment is provided by a simple marking scheme. Students working alone should especially appreciate the guidance provided throughout.

FWK

The marrying of GCSE with Records of Achievement Going for GAIM

MARGARET BROWN • SUE BURNS
ALICE OXON

As the GCSE machine continues to trundle slowly towards 1988, it may not be the most tactful moment to draw to the attention of mathematics teachers the stated intention of the DES that "... by the end of the decade ... all young people in secondary schools will have records of achievement."

These records are expected to contain information about students' attainments in academic and practical skills, as well as personal qualities and achievements. They will be updated as students progress through the secondary school, and will form the basis for a final summary document which the school leaves takes away. Many schools are now involved in compiling such student records, often in conjunction with the DES-funded Records of Achievement projects spread throughout the country.

It is clear that the records of achievement initiative shares many of the more progressive features of GCSE in that it is moving towards a more continuous model of assessment by classroom teachers, with more precision about what students have achieved over a wider spectrum of performance. The irony is that in spite of this the mechanisms are quite distinct. Teachers currently pre-occupied with the "stepped" syllabuses and papers and the "set-piece" coursework tasks for mathematics GCSE running through the fourth and fifth years are now expected to start thinking about recording in detail what first and second year students have achieved. HMI offer some advice as to how to do this in *Mathematics from 5 to 16*.

"A useful approach is to have one record sheet covering a year in the life of the pupil in which one side of the sheet contains carefully structured details of the appropriate objectives and scores on any standardized tests used, while the reverse side is used for recording pupils' progress as measured against their own previous achievements."

It sounds so simple, except when you remember that in your second-year class your record may well have to cope, at one extreme, with one child whose major achievement in the whole year is learning that the number after a hundred and nine is not "two hundred". At the other extreme it would not be easy to describe exactly what might have been learned by a second-year student who had managed to complete much of the O level syllabus while working on an individualized scheme such as SMILE or KMP.

What is evidently required, to avoid duplication of effort on behalf of teachers and students, is a system of assessment which contributes to a Record of Achievement and also provides, when appropriate, the basis for a GCSE award.

GAIM (Graded Assessment in Mathematics) is an assessment system being developed jointly by the ILEA, LEA, and King's College London, with support from the Nuffield Foundation, which claims to fulfil these requirements. It offers a bank of "topic criteria" in the form of "can do" statements, which can provide a mathematics profile to be incorporated into a record of achievement. These criteria are each assigned to one of 15 levels of difficulty, and to one area of the mathematics curriculum. So "can read and write numbers up to 100 in figures" is assigned to Number, level 1; "can draw the net of a cuboid or prism with the objects present" is in Space, level 7, and "can construct flow charts or computer programs using loops and/or branches" is in Logic, level 12. The remaining topic areas are algebra and functions, measurement, and statistics.

Only a very small proportion of students will begin at level one; in fact the average first-year student should be able to join the system at around

level five or six. The levels are designed so that students will progress on average through one level a year.

The second element of GAIM is a bank of open-ended practical problems and investigations, many of them suitable for extended work. For example, practical problem-solving tasks include booking guests into appropriate rooms in a hotel, and designing the layout of newspaper advertisements; the investigations include exploring symmetry patterns obtained by shading squares on a grid, and different types of number chains. The teachers' notes for these activities include guidance on what kind of responses are likely to be given by students working at each of the 15 GAIM levels. In addition, an indication of the topic criteria which may be demonstrated by students in the course of the task is given.

Some teachers may want to use the GAIM activities to supplement their curriculum, perhaps as GCSE coursework, or may want to incorporate some of the GAIM topic criteria into their own profiling scheme. Others may want to use the full GAIM scheme, enabling students to be awarded a Statement of Achievement at a particular level from the LEA. Such a statement can be awarded when the student has achieved a level on a certain number of practical problems and investigations and has provided satisfactory evidence of attaining the topic criteria on that level. Where students have in addition satisfied groups of topic criteria in higher levels, these too will appear on the summarized profile on the statement of achievement. Before statements can be awarded, a LEA-appointed monitor must make regular visits to the school to check that the scheme is being operated satisfactorily.

GAIM levels 9-15 have been designed to be equivalent to GCSE grades G-A. Detailed topic criteria are completed up to level 12 (grade D) and a submission for a limited grade GCSE based on course work is at present under consideration by the SEC. There are plans to extend this to a full-grade GCSE proposal as soon as the development of the corresponding GAIM levels is completed.

The pre-GCSE GAIM levels are at present being piloted in 35 schools over eight i.e.s. Many colleagues report that the use of the scheme has a motivating effect with low-achieving third, fourth, and fifth years, some of whom would otherwise leave school with no formal recognition of their achievements. For example, from a Newham teacher, "... they are keen on getting something ... it's keeping them going ... they might have switched off completely."

There is an additional hazard that many junior school teachers do not understand the topic very well themselves. (For example, how many could explain why $ab \times cd = ac/bd$?)

It is not always understood that fractions are in different bases and so what causes the arithmetic to be so

Margaret Brown, Sue Burns and Alice Oxon, GAIM Project, Centre for Educational Studies, King's College London (KQC).

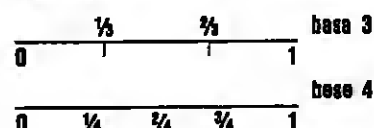
EXTRA

Facing a world wide problem Fractions: turn them upside down

PETER KANER



different. It might help if the word denominator was replaced by the simpler word base when talking about fractions.



This diagram is supposed to convince that $1/2 = 1/2$. But to many children the diagrams are not the same. The first has three parts while the second is in six parts. Can the teacher mean that one piece equals two pieces?

"No dear, we are not talking about the number of pieces, we are talking about the proportion, you know, the proportion of the whole."

Much confusion ensues, because very few children have the slightest idea of what the "proportion of the whole" could mean. Upon these shifting sands the explanation of the addition of two fractions is built and quite understandably the house falls down. The diagram below (Optimistically based on 50 per cent success at every stage) explains why only one out of eight children can add simple fractions successfully.

There is the additional hazard that many junior school teachers do not understand the topic very well themselves. (For example, how many could explain why $ab \times cd = ac/bd$?)

It is not always understood that fractions are in different bases and so what causes the arithmetic to be so

Is this a fraction?	Equivalence	Rules for addition	But what here?
understood	understood	understood	understood
understood	understood	not understood	not understood
understood	not understood	not understood	not understood
understood	not understood	not understood	not understood
not understood	not understood	not understood	not understood
not understood	not understood	not understood	not understood
not understood	not understood	not understood	not understood
not understood	not understood	not understood	not understood



Children understand the word "value" in connection with money and I find it a very useful word in teaching fractions. Here value is short for "base 10 value", so the value of any fraction is found by dividing top by base on a calculator. The concept of equivalence becomes very simple indeed, fractions with the same value are equivalent, but there is a much more important consequence of using values. The learners can make their own assessment of whether calculations with fractions are right or wrong by checking the values, on intuitive process.

For example, many children would add $1/2 + 1/2 \rightarrow 1/2$, adding tops and bases. Checking the values, however, shows this result to be wrong. $1/2 \rightarrow$ value 0.333 ...

$1/2 \rightarrow$ value 0.75

TOTAL 1.0833 ... (corresponds with a rough measurement)

$1/2 \rightarrow$ value 0.571428

Children may ask very important questions: 1. What went wrong?

2. What manipulation of $1/2$, $1/2$ could give the right answer?

The answer to (1) is simply that the two fractions $1/2$ and $1/2$ are in different bases and adding the bases does not produce addition of values. All the work on equivalence which has failed us before can now be produced in answer to the children's "why?" It is not an essential part of manipulating fractions, rather a matter of familiarity and background knowledge.

New Skills When the above approach is adopted some conventional skills need to be replaced by others. Some examples are given ...

1. The reciprocal button comes into its own when decimal forms are to be converted into fraction forms. The relationship between a/b and b/a is studied and used.

2. Cross products of equivalent fractions are demonstrated with reference to the value.

3. Cancelling is hardly necessary as the calculator does not need simplified arithmetic, but knowledge of the decimal forms of common fractions is useful.

Preparation for A level Many students starting on A level courses are found to be very weak on fractions, especially cross multiplication. This is taken to be the result of neglect of the teaching of fractions in earlier years but I suggest the opposite, that fractions have been over-taught and unskillfully taught. It is the lack of confidence and fear of error which interferes with student progress. Algebraic manipulation is something in its own right to be taught as a consequence of the rules of an integral domain rather than something to be extracted by distillation from elementary number work.

Conclusion I think I have outlined a fundamental change of approach which needs to be thoroughly integrated into maths teaching before we can expect more success. The greatest problem solving skill is learning from mistakes so let's abandon the apples, pies and circular fields and start from a new point of view, not just now and again but NOW and AGAIN and AGAIN and AGAIN and AGAIN.

Peter Kaner is author of the Integrated Mathematics Scheme (IMS)

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EXTRA

Providing the right help for coursework

Over to you

BARBARA EDMONDS

By 1991 every candidate for a GCSE in mathematics will have to produce coursework. This means that all 11-year-olds should have already started to develop the skills they need in order to do this. What are these skills? Probably the two most important are the ability to develop your own mathematical ideas, and the ability to communicate these ideas to others. Some older pupils are already submitting coursework to count towards their GCSE assessment. One of the difficulties some of these pupils have to overcome is their lack of experience with this way of working. Our 11-year-old pupils should have the advantage of being able to develop these skills over several years. What can teachers do to help this to happen?

Most human beings enjoy learning. Very young children learn to walk and talk and spend all their time making sense of their world. Learning can be fun when you are in control of it. Unfortunately, once children are at school it is not easy for the teacher to give them control over what they learn and how they learn it. By the time they are in secondary schools, pupils have been so used to having their learning controlled for them that it is difficult to help them to become independent and take back the control. This is perhaps more true for mathematics than for any other subject.

Traditionally mathematics has been seen as a body of knowledge about which statements are either right or wrong. Hence it is rather frightening for pupils to develop their own ideas,

because these might be wrong. One way of helping pupils to overcome this fear is to find tasks for which they can know that they have been successful without asking their teachers for confirmation. They will have then gained a degree of control over their learning. I recently worked with a group consisting of two fourth-year mixed-ability classes on such a task.

The pupils were asked to consider a cube which was dissected into a number of pieces: as many pieces as they liked. Their task was to construct models of the pieces from cardboard. The only restriction placed upon the pupils was that each pupil had to produce a dissection which was different from all the others. I started the lesson by showing pupils several models of cube dissections which I had made. I described briefly how I had designed my models, suggested some practical tips about their construction, and then gave out all the equipment pupils would need. All this had taken about 15 minutes. The next 15 minutes were the worst: the class teachers and I sensed a mild feeling of panic from the pupils as they struggled to decide what to do and how to get started.

By the end of the lesson most pupils had made their decisions and were checking with others that their dissection was unique. They were keen to make comparisons, and to point out to their teachers why their idea was "better" than everyone else's. For the next two weeks the pupils worked hard at building their models. They had been told that, since the work was to



Monk mathematicians of the 13th century

form part of their GCSE coursework, they also had to produce a written account which would describe their plan and explain how they had constructed their model. Their teachers and I felt almost redundant during these two weeks. We did give specific help when asked: for example, about how to construct an equilateral triangle. But the pupils helped each other most of the time. Although they were all doing different dissections they found they had similar types of problem to solve.

After two weeks pupils handed in their work and we graded it, using the GCSE coursework assessment scheme. Most pupils had done much better than usual, although a few had done less well. The ability to visualize and work on three-dimensional shapes does not seem to correlate very closely with the ability to do more conventional mathematics, such as manipulating numbers or symbols. We were interested to observe that eight of the 10 pupils who were given grade A were girls. Perhaps the most interesting observation for the teachers and for me was the large number of positive comments pupils made about the task in their reports. Nearly all of them described it as one of the best mathematics tasks they had done.

Many of them were able to make a sensible evaluation of what they had done: something they usually find difficult in mathematics. One girl wrote: "I am quite pleased with my dissection cube turned out. I did face a few problems, though. Making the rough models from graph paper was easy because it had lines drawn on it and it was much thinner than the card. When I made the card models, it was a lot harder to make the nets accurate and to get the lengths and the angles exactly right."

What was it about this task that made it so popular with pupils? Many of them spoke about enjoying the practical aspect and about having to do less written work than usual. But the main reason seemed to be that pupils felt in control of what they were doing: they were working on the dissection they had chosen. This meant that they could work at the level of difficulty that suited them. One boy wrote: "I liked my idea. It wasn't too hard and it wasn't too easy." The task had a specific end-point, the cardboard model, at which pupils could aim, and they could see for themselves whether or not their dissection "worked". One girl said: "You see if your design ends up good."

What else was it about the task that

made it suitable for GCSE coursework? Most coursework assessment schemes reward work which shows candidates' abilities to develop their own mathematical ideas. I have already pointed to the difficulties pupils find with this. As a consequence of these difficulties teachers are tempted to provide their pupils with coursework tasks which are highly structured. Although they can easily get started with such tasks, having an opportunity to develop the work for themselves means that they cannot score high marks. On the other hand, pupils who are given too little help may produce inappropriate work with little mathematical content. So, teachers need to devise coursework tasks which provide pupils with the right amount of help. Dissecting a cube appears to be such a task. Hopefully, we can devise for our pupils other coursework tasks with similar attributes. It is useful if we can find ways of providing frameworks within which pupils can have control over how their own work is structured.

Barbara Edmonds is head of Mathematics at Longsight College, Birstall and is currently on secondment to the Open University. She is also the chief coursework consultant for mathematics to the Midland Examinating Group.

A rethink of sixth-form mathematics

SMP 16-19

STANDALONE

There is a growing recognition of the urgency of the need to rethink mathematics A level. The passive learning styles adopted by many sixth-form students and their perception of A level mathematics as a series of apparently unrelated techniques can certainly give us no cause for satisfaction with the present situation. Changes in the content of 11-16 courses and, especially, changes in the teaching process at this level must be catered for in the redesign of sixth-form courses. An added impetus for change comes from the impact of new technology, which should be altering both what we teach and the way we teach it.

In the DES document 'Action on Teacher Supply in Mathematics, Physics and Technology' the Government recognized the urgent need for action on teacher supply. In fact, the proportion of 18 and 19-year-olds who are in a third between 1984 and 1996 with a consequent drastic reduction in the size of the pool of potential teaching recruits. To avert a national disaster in the teaching of subjects vital for the future of an advanced industrial nation will require more than changing the accessibility of A level mathematics courses, but it is clear that we can no longer tolerate the perpetuation of the image of mathematics as a difficult, A level subject. Changes in the course and its assessment are needed to enable pupils who put in an honest endeavour to experience a greater sense of achievement. Moreover, the traditional severity of A level mathematics grading (as is evidenced by subject pairs comparisons) cannot

be permitted to continue. This severity acts as a considerable deterrent to potential A level candidates, even though their only knowledge of it is likely to be based upon hearsay within their school. In September 1986, the School Mathematics Project set up SMP 16-19, to reform mathematics teaching in the sixth form. As with all SMP projects, those who will be affected by potential changes - practising teachers - have the primary responsibility both for formulating policy and, later, for evaluating in trials the materials they have produced. Currently approximately 50 teachers and advisory teachers are directly involved in working groups with many more involved peripherally with the project.

The current A level structure remains, then SMP 16-19 will need to encompass a wide range of sixth-form options. These might include a foundation course for intermediate-level GCSE students and AS levels, as well as differentiated courses and assessment for A level. Currently, working groups of teachers are involved in assessing how the teaching of certain key areas will, or should be, affected by the pressures for change already listed. This work will be of great value, whatever sixth-form structure is adopted as a result of the Hargrave Committee's work.

The existence of sophisticated computer packages, such as those of David Tall of Warwick University, has enabled the Calculus group to investigate

promising new ways of making calculus concepts more accessible to A level students. A qualitative understanding of the concepts is greatly facilitated by this software and the study of calculus itself is made much more meaningful when pupils can readily use micro to solve realistic problems.

The use of micro is also a central issue for the Graph-sketching group, which is working in collaboration with M.E.I. Graph-plotting software facilitates the adoption of an investigative approach. Pupils can discover for themselves general relationships: for example between $f(x)$ and $f'(x)$, by studying a wide variety of functions. Similar analysis can be applied to discovering the properties of particular families of curves, for instance by demonstrating the transformation of $y=x^2$ into any given quadratic.

The working groups on Statistics and Mechanics are addressing themselves to the question of how branches of applied mathematics should be incorporated into the course. An outline of the issues can be found in paragraphs 565-575 of 'Mathematics Counts'. There are strong arguments in favour of all A level mathematics students having some knowledge of both Newtonian Mechanics and Statistics. Indeed, similarly strong arguments can now be made for incorporating a study of newer branches of mathematics.

The fundamental question is whether such areas of application should be studied as options or whether it is possible 'to incorporate them

EXTRA

Games: a rich source of starting points

Ancient and modern

MICHAEL CORNELIUS

Most people enjoy playing games. Not many enjoy doing mathematics. So what happens if games and mathematics are packaged together and presented to children?

Board games have a long, fascinating history and often tucked away in both ancient and modern games are ideas which can be put to good use in a mathematics classroom. Indeed games can be used in activities which span many other areas of the school curriculum and questions like: where does a game come from? When was it first played? Could it be made? suggest possible links with geography, history and the use of practical skills in woodwork etc. At a time when teachers are looking for ideas for motivational work, games can provide a rich source of starting points. The following is a brief description of work tried in mathematics classrooms with pupils aged between 10 and 18.

(i) A game of position: Poog Hau K'i. This game, from China, is also played in Korea under the name O-muk-k'o-no. It appears to be deceptively simple. Each of two players has two stones of different colours placed as shown in Figure 1. Players take it in turns to move one stone along a line to an adjacent empty point and each player tries to block the opponent's stones.

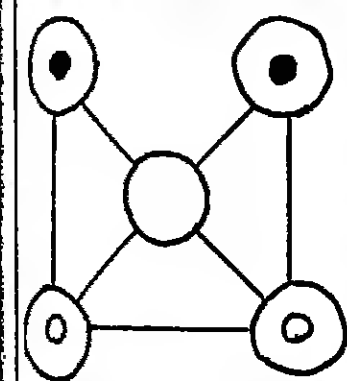


Fig 1

Can a win always be forced? Is it better to be black or white? Should a player choose to go first or second? How many possible positions exist in the game? How can a game be recorded? Given the game to play and investigate, lower secondary pupils struggled to achieve a good notation for recording purposes. Games were played with great intensity and reasonable conclusions often reached. One group of eight and nine-year-olds became excited and interested enough to want to organize a class competition.

(ii) A 'Mancala' game: Tchuka Ruma. Mancala games involve the "sowing" of seeds or pebbles into holes and

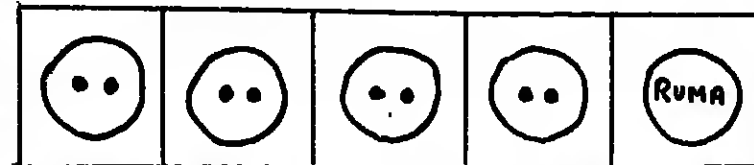


Fig 2

originate mostly from Africa and Asia. Tchuka Ruma is an East Indian game for a single player. It is played on a board with five holes, four each contain two pebbles at the start and the fifth (the Ruma) is empty. (See Figure 2 above).

A player picks up the seeds from any hole and "sows" them from left to right dropping one in each hole passed. If the Ruma is reached with more than one piece in hand, the sowing continues at the extreme left hand hole. If the last seed sown drops into an empty hole you lose, if not you sow again (starting from the hole in which you finished). If the sowing ends in the Ruma you may select any hole to begin the next move. The aim is to get all the seeds in the Ruma. As an example of a beginning:

2 2 2 0
3 2 2 0
0 3 3 1

and the game is lost since the last piece sown fell into an empty hole.

Can the game be solved? How many solutions are possible? What happens if (a) the number of pieces and (b) the number of holes, are varied?

This game proved immensely popular with all ages. It was interesting to observe a group of sixth-formers in which every pupil quickly resorted to coins, torn up pieces of paper etc to represent seeds. One group of children played the game using themselves as pieces and chairs as holes. A good fourth-year group produced attempts at generalizations of the game including analysis of which games could be solved.

(iii) A "War" game: Fox and Geese

There are many forms of this game which probably originates from Northern Europe in the 14th-century. A large number of similar games involving lambs, tigers, cows, leopards,

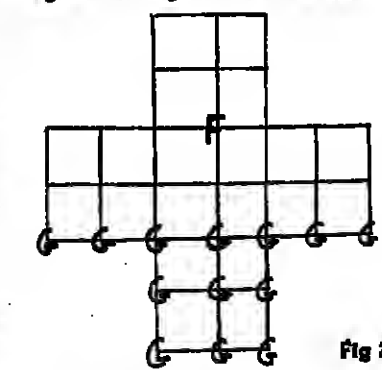


Fig 3

SMP 16-19 continued

fundamental concepts into a coherent course syllabus without detracting from our aim of not oversteering "content" and of making the course accessible. In this sense the working groups are carrying out the curriculum studies asked for in paragraph 569 of 'Mathematics Counts'.

One other issue of special relevance to the Statistics and Mechanics working groups concerns the precise nature of the practical work which should be incorporated into their material. This aspect of our work is being greatly influenced by discussions with members of the Mechanics in Action Project based at the Universities of Leeds, Manchester and Sheffield and Plymouth Polytechnic and also with members of the Centre for Statistical Education at the University of Sheffield and Sheffield City Polytechnic.

Experience with SMP's proposed content grade A level and of the experiment with projects and comprehensive papers at Further Mathematics level will eventually feed into the work of SMP 16-19. One project on modelling and simulation, set by the work of the Spode Group, will also be of value for the necessary work of SMP 16-19 in planning the forms of assessment.

The ultimate aim of those working

six geese left on the board? How can a game be recorded?

Pupils enjoyed playing this game. The development of co-ordinate systems arose out of the problem of keeping a record of a game. Considerable discussion (and some confusion!) arose from consideration of the number of ways in which pieces could be placed on the board with problems of reflections and rotations.

(iv) A "Race" game: Pachisi. This game is a forerunner of Ludo - it is widely played in India and developed from a game called Psalti. It is played on the board illustrated in Figure 4.

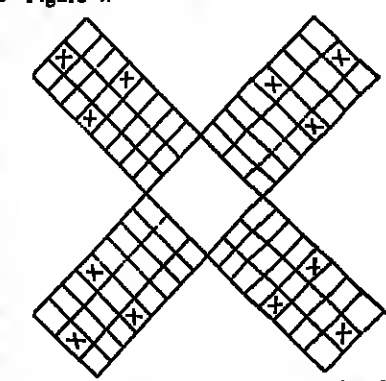


Fig 4

In the usual game four players each have four pieces of a distinctive colour and all start on the central square (called the "char-koni" or throne).

Pieces are raced down the centre of the player's own limb, then anticlockwise round the board before returning to the centre via the original limb. An exact throw must be achieved to get a piece "home". The game is controlled by the throws of six crows - the number of mouths falling upwards determines the score with 2, 3, 4, 5, 6 giving moves of the same number but one mouth up giving 10 and no mouths up giving 25. The complete rules are not given in detail here but include players forming composite pieces, knocking opponents off the board and the possibility of a piece doing more than one lap (perhaps to help a partner).

A game like Pachisi (or Ludo) is often enjoyed by pupils but does not lend itself immediately to "obvious" investigation. The following ideas are given as suggestions. If a single player plays and moves four pieces round the board, what is the smallest number of throws needed? What would happen to a single piece if a player threw nothing but (a) tens, (b) twenty-fives? Pupils, especially older ones in secondary schools, proved capable of producing much valuable investigational work from this and similar games - an initial stimulus or suggestion of a starting point invariably proved to be essential.

A book on "Board games and mathematics" written by Robbie Bell and Michael Cornelius will be published by Cambridge University Press during the next academic year.



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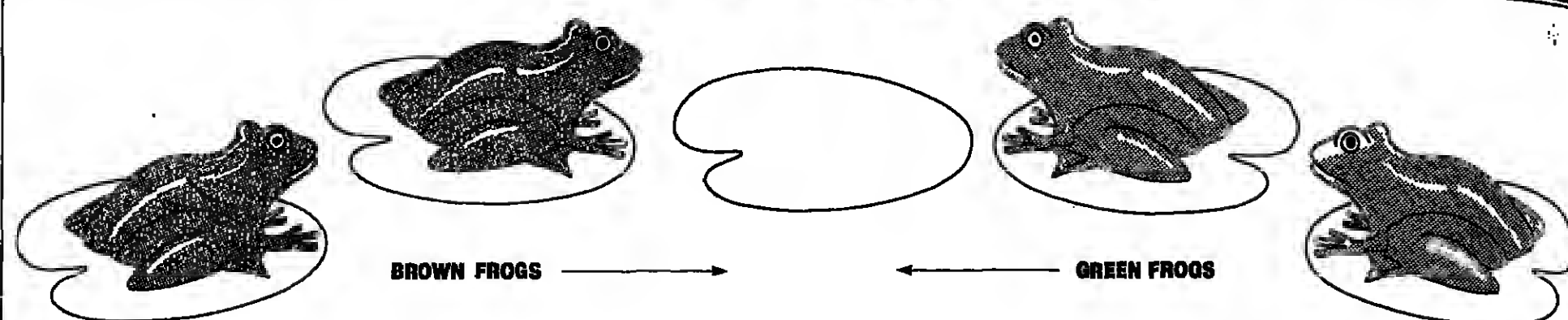
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E J Arnold

at work in the classroom

EXTRA



A PGCE course partnership model

Jumping to conclusions

As part of the school-based component of their secondary PGCE course, our 26 mathematics students spent one morning each week during the first term of this academic year in five South Tyneside secondary schools. After negotiating with teachers and tutors the students, working four to a class, were given responsibility for the overall planning and organization of the activities which were to take place in their classrooms. The class teacher, the university tutors, and the Educational Support Grant teacher responsible for secondary mathematics were also involved in the activities but only in the role of classroom assistants.

This model of CP-INSSET (Initial Training for some and Inservice Education and Training for others) has been developed as a "partnership model", and it is hoped that all the partners involved in the enterprise will benefit from the experience. The pupils ought to gain from the availability of a large number of teachers in the classroom at any one time. For the students there is the obvious advantage of taking responsibility for the teaching of a small group of pupils prior to their first short teaching practice, and the opportunity to experiment with different classroom approaches. The teachers can observe activities which may be new to them and which they might wish to try out for themselves, and the lecturers are provided with the opportunity to gain some useful "recent and relevant" classroom experience.

On the second visit to their respective schools most of the six groups decided to explore the famous "Frogs" problem with their classes, having tackled it themselves in a workshop session in the School of Education. The following is an account of their experiences.

The problem is as follows: Two green frogs and two brown frogs are

sitting as illustrated above. The aim is to interchange the green frogs with the brown ones in the least number of moves and in accordance with the following constraints:

1. Green frogs may only move to the left and brown ones to the right.
2. A frog can slide on to an adjacent empty lily-pool or hop on to one.

If you have never seen this problem before it would be worth spending a few minutes (or hours!) getting a feel for it before reading on.

The students decided that it would perhaps be a good idea to introduce the problem by using the children as frogs before moving on to tackling the problem in small groups using different pieces of apparatus which they had designed. Five chairs were set out at the front of the room and two boys and two girls were asked to act as the green and brown frogs respectively, with the rest of the class acting as "advisers". (The use of the different sexes was decided upon after initial problems had been experienced by the observers in ascertaining which way any individual frog was travelling).

What was of particular interest to the students was the enthusiasm with which the children, who were first and second year secondary school pupils, tackled the problem and the variety of ways in which they grasped the underlying patterns. The following examples should illustrate this latter point.

One group of children decided to tabulate their results in terms of slides and jumps as this terminology had been stressed in the "human frogs"

IAN THOMPSON										
no. of frogs	11	22	33	44	55	66	77	88	99	00
no. of jumps	1	4	8	16	25	36	49	64	81	100
no. of slides	2	4	6	8	10	12	14	16	18	20

Fig. 1.

activity. Asked how she had filled in the results for the situation with six frogs on each side (see Fig. 1 above) Leeanne (12) said:

This has got to be 12 and this has got to be 36.

She could see that there was a pattern, but was unable - or unwilling - to explain it. Sharon (13) on the other hand wrote:

You square the number of frogs for hops and you double it for the slides. If you add them together it tells you the number of moves.

Expressed algebraically Sharon's solution is $n^2 + 2n$ and although it was beyond her experience to be able to express her answer in this way one can see the potential of such a context for the introduction of the power and economy of algebraic notation.

A second group worked out the first four answers and then predicted the next one before checking whether or not they could do the problem in that many moves. Morrie (12) and Michelle (13) who were working in different groups saw the pattern in terms of differences. Marie wrote:

The pattern is all the odd numbers

one at a time are added to your answer, so the next one will be 35. Michelle (13) on the other hand set her table down as in Fig. 2.

Her explanation was:	
Number of frogs	Number of moves
1 and 1	3 (2+1)
2 and 2	16 (3+3+1)
3 and 3	35 (4+4+1)
4 and 4	64 (5+5+1)
5 and 5	100 (6+6+1)

Fig. 2.

Add one onto the number of frogs there are and add this to the last answer.

So Michelle had seen the differences between successive answers not as the odd numbers but as a function of the number of frogs under consideration.

In a different classroom Eddy (13) and Gavin (13) did not see the pattern in terms of differences but in terms of products and sums. Eddy wrote:

You times the number of frogs by two more.

He had seen the answer 8 as 2×4 and 15 as 3×5 , and had hypothesized that the next answer would be 4×6 - which it was. On the other hand Gavin's explanation of the pattern was as follows:

Multiply the two then add then add. By this he meant "multiply the number of frogs on one side by the number of frogs on the other side, and then add the answer to the number of frogs on both sides. This form of the solution (the product plus sum) is also true for different numbers of frogs on each side.

Eddy's solution expressed algebraically is $n(n+2)$ whereas Gavin's is $n \times n + n + n$ or, more simply, $n^2 + 2n$. These expressions are of course equivalent.

In one particular class which had done some work on square numbers (1, 4, 9, 16, 25, ...) in the previous year one boy, John (13), surprised several of the adults in the classroom - because they had not realized it themselves - by saying:

It's easy. It's just one less than the next square number.

Another group kept track of their movements who acted out the three by three problem by writing S for slides and J for jumps. They then split the line of letters into groups of movements made alternately by different coloured frogs. This enabled one or two of them to see a certain pattern and symmetry in the movements that they could generalize to the four by four situation (see Fig. 3 below).

3 by 3
S J S J S J S J S
S J S J S J S J S
S J S J S J S J S

Incidentally, this interesting diagram nicely illustrates all the discoveries made by the other children. It is left to the reader to verify this.

What then did the participants in this particular exercise get out of it? The pupils were involved in purposeful practical mathematical activity. They were engaging in a great deal of mathematical thinking - trying special cases; generating data and tabulating it; making and testing conjectures; looking for patterns; justifying their ideas to their friends; generalizing and expressing their conclusions in "log-hand" algebraic form. They were also

including in activities which could provide a background for the introduction of standard algebraic notation. They were experiencing work which would (different) traditions of solution, and

ostensibly different answers were not just accepted but openly sought.

Some were developing their confidence in their ability to do mathematics, whereas others were being turned on to mathematics for possibly the first time in their lives. In the reporting back session many students recounted stories of apparently disinterested or disaffected pupils gradually becoming more and more involved in the lesson, or of children classed as remedial who suddenly produced a flash of insight the amazement of their friends - and often of themselves. The students were pleased that they had succeeded in motivating almost all the pupils, and had gained some practical experience of theoretical insight into children's mathematical thinking. The activity had provided a great boost to their confidence, and had motivated them to prepare their next session with the same attention to detail.

Some teachers went on to extend the work and develop the algebraic ideas, whereas others used problems of their own to try out some of the ideas introduced on GCSE training courses. Those teachers who were not using practical equipment, investigative methods or group work might possibly have seen some of their pupils in a different light. Onesalutary lesson for the tutors was the realization that the slick algebraic solution to a problem often conceals from the solver a wealth of fascinating mathematical relationships which are in there just waiting to be discovered.

This particular morning's work had proved to be highly successful, and all the participants were hoping to maintain the momentum - but that's another story!

Ian Thompson is lecturer in Mathematics Education, University of Newcastle upon Tyne.

Fast food

Mathematics: Lessons at a Moment's Notice. By D Cottao. Poulsham £3.50. 0 572 01361 2.

The author seeks to help teachers who have lessons thrust upon them, with little warning or with no time for preparation. He provides two dozen themes which can be immediately exploited in any part of the 9 to 10 years age range.

The ideas are, in fact, very much those with which competent and experienced teachers are familiar, and which many doubtless use to enliven routine lessons. Exercises on map squares or tangrams, codes and puzzles, and cryptarithms (which are cryptograms with figures taking the place of letters) are typical.

A quiz ("how fast does sound travel?", "how hot is the sun?") involving numerical answers also contains the intriguing questions, how fast is a sneeze and how loud is a sneeze?

Published three yearly by the Mathematical Association, the magazine is intended for anybody with an interest in maths, but is aimed particularly at secondary school pupils, with the hope that it will "extend and enrich the basic content of school mathematics". Articles on such topics as trigonometry, the origin of numbers, nomogram ratios and acoustics, number triangles and more recreational mathematics are interspersed with letters to the editor and more recreational mathematics.

Mathematical puzzles, competitions, mathematical enigmas and quotations are included in activities which could provide a background for the introduction of standard algebraic notation. They were experienced work which would (different) traditions of solution, and

EXTRA

NORMAC weekend conference for teacher advisers

Confidence and progress

BILL BAILEY

In a previous article (*The TES Mathematics Extra*, May 9, 1986) I described a weekend course organized by NORMAC (North-East Region Mathematics Council) for newly appointed teacher advisers. A further event was held in March when the course identified the essential issues of change in the classroom and the change in attitudes that must precede it. Most sessions were concerned with what was happening nationally in those areas in which teacher advisers are engaged.

Valerie Worcester of the Primary Mathematics Project (PRIME) described the aims of the project which is concerned with encouraging curriculum development to be done by teachers. This was described as a "bottom-up" or "pop-down" approach, as opposed to the "top-down" or "bidet" print-out of primary mathematics which was to be undertaken include the following:

- ways of helping teachers to use a full range of teaching styles;
- the role and use of language in primary mathematics;
- mathematics across the curriculum;
- the role of the computer in primary mathematics;
- the development of a calculator-based number curriculum;
- other "topic" areas such as measurement, logic and probability;
- children's use of general mathematical strategies and processes;
- mathematics for very low-achieving children;
- multi-cultural and gender issues in primary mathematics;
- the role of parents in their children's mathematics learning.

Barbara Stewart and Ian Hocking saw the calculator-aware curriculum as being a way to improve the quality of mathematics education in a primary school. They described how it had been put into practice. School-based work involving the following aspects was being carried out:

- development of teacher expertise through INSET;
- explaining ways of using the calculator;
- receiving published material on calculators;
- identifying those parts of the primary mathematics curriculum where the calculator is most helpful;
- developing new materials for use with calculators;
- investigating a possible change of emphasis in the primary number curriculum;
- evaluating the effect of calculator use on the learning and attitudes of children.

Their experiences had revealed that calculators had been made available in schools earlier to solve real problems (eg with "difficult numbers") and for solving problems (eg by iterative methods). The use of calculators had revealed mathematical activity and involved both pupils and teachers.

A session was devoted to the role of the co-ordinator and Marjorie Snow, a senior officer with NFER, described the role of a project which is investigating the role in primary and middle schools.

Questionnaire responses showed that 65 per cent of the primary schools surveyed had allocated a post for a co-ordinator for mathematics. In 10 per cent of schools the co-ordinator had a written job description in their role. The sample of co-ordinators were asked to give their own rating of effectiveness in investigating each of the duties listed in paragraph 3.5 of the Cockcroft Report.

The list shown below indicates a range of priorities and practice priorities.

It is now difficult to imagine a world without teacher advisers, like all new initiatives they have generated their own enthusiasm. The next stage of the programme is the most difficult since progress must be sustained through the implementation of the programme, the development of relationships and

the necessary teaching resources for mathematics:

- providing guidance and support to colleagues;
- arranging school-based in-service training;
- monitoring work in mathematics throughout the school;
- assisting with the diagnosis of children's learning difficulties and remediation;
- maintaining liaison with schools and the I.C.A.

It was suggested that a national mathematics centre should be established where co-ordinators could receive training. It could use teacher advisers as tutors whose expertise might well be lost if and when Education Support Grant funding ends. Barbara Craig, the North West Co-ordinator of the Raising Achievement in Mathematics Project (Secondary) described how the scheme attempted to develop good practice in the teaching of mathematics to low-achieving pupils and in disseminating its findings. She identified four major areas where there had been resistance to change in mathematics teaching. They were:

1. the attitude of some teachers and the lack of confidence in teaching mathematics;
2. rejection of any ideas that come "from above";
3. the reluctance of parents to accept change, unless they can understand what is going on;
4. the introduction of new material not necessarily affecting the teaching method (ie "the new sterility").

She felt that the RAMP project would be successful for three main reasons. First, it was adequately financed; second, the teachers involved did not engage in writing materials; and finally, it was realized at a very early stage that the dissemination of effective ideas about change can be done only by personal working contact between teacher advisers and teachers.

The final session, "Review and Evaluation of the work of Teacher Advisers", was chaired by David Hale HMI. Teacher advisers were seen as having the opportunity to be influential in the following aspects of mathematics education.

- Promoting an investigative approach, not just linear, controlled examples but by encouraging teachers to seize opportunities for investigations in their normal work.
- Encouraging continuity of mathematical experience throughout school life.
- Helping schools to develop a partnership with parents; some work had been done in reading, so why not in mathematics?
- Seizing multi-cultural opportunities by taking advantage and using the variety of backgrounds that pupils come from.
- Fostering genuine group work: children should not just sit in groups but should have the opportunity to work collaboratively.
- Promoting and sustaining the use of the microcomputer and calculator in improving the quality of mathematical activity.
- Encouraging an appreciation of three dimensional understanding in children.
- Loosening the straitjacket of a commercial scheme. Teachers should feel the need to use their own ideas and approaches.
- Disseminating the findings and knowledge of such bodies as the APU to as many teachers as possible.

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Photo: Judy Chapman

operators. The initiative must not become over-institutionalized and the long term improvement in the quality of pupils' learning must remain the chief objective.

Teacher advisers were appointed through the ESG scheme at a time when teacher morale was generally low and during a period of intense industrial action. Their appointment was a calculated risk. They were taken out of the classroom and immediately transferred to a position of responsibility where they were expected to spread their own good practice. Two major qualities had been revealed as vital ingredients of success: infectious en-

thusiasm and the ability to form good working relationships. The form of relationship that a visitor makes with a school is crucial to the success of the original or negotiated intention of the contact. In general, teacher advisers have proved to be sensitive to and confident in dealing with their colleagues.

Now that the scheme is half-way through there is an obvious concern about the future. Some teacher advisers have left for other jobs. So much has been achieved in such a short period of time that it would be regrettable if the successes of the scheme were undermined by worries about job

security. Course members hoped for an announcement from the DES about an extension of funding so that they can continue their good work.

NORMAC is part of the Nuffield Continuation Project and is based in the north-west although it includes part of North Wales and West Yorkshire. The courses for teacher advisers are organized on behalf of NORMAC by John Ireland, Liverpool Institute of Higher Education. Facts about NORMAC and an extended version of this article can be obtained from P A Bailey, Secretary (NORMAC), c/o Mirfield High School, Kelson Hill Road, Mirfield, West Yorkshire WF14 9EZ.

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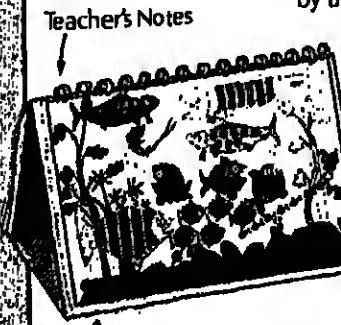
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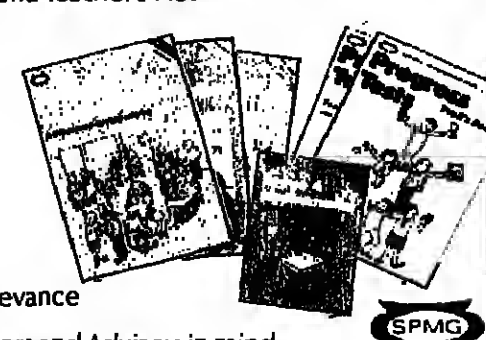
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A cure for insomnia

It is significant that the author of *The Game of Logic* and a more serious treatise on *Symbolic Logic* published these books under his pseudonym, Lewis Carroll, whereas his mathematical books were produced under his proper name, the Revd C. L. Dodgson, lecturer in Mathematics at Christ Church, Oxford.

To many people logic is simply a form of mental gymnastics, or juggling with words, but to Carroll it was just a game for children to play with red and grey counters on a square board divided into four or eight regions. This simple apparatus enabled one to find the logical deduction, if any, from premises such as (i) "All jokes are meant to amuse", and (ii) "No Act of Parliament is a joke".

His conclusion was, "some things are meant to amuse, not Acts of Parliament".

I have a precious copy of his *Synthetic Logic: Part I: Elementary*, second edition, price two shillings, published by Macmillan and Co in 1896, two years before his death at the age of 45 years. The book contained an advertisement, stating that Part II: *Advanced*, would contain further investigations into syllogisms (as in Part I) and into Trilevel and Multilevel Propositions, Hypotheticals, Dilemmas, Paradoxes, etc. etc. while Part III: *Transcendental*, would be devoted to Analysis of a Proposition into its Elements, Numerical and Geometrical Problems, and many other curious logic.

One wonders whether any readers responded to his appeal for good examples of Fallacies, or out-of-the-way Problems, Dilemmas, or other Puzzles in Logic, to supplement the "quantity of MS in hand for Parts II and III, that remained unpublished". There was a rumour current in the "mathematical circles" that Queen Victoria, having read the Alice books with pleasure, asked for further books by the author. When she was presented with a copy of his booklet on Determinants, it was said that she was not amused. The author was outraged by this rumour, and published an indignant rejoinder: "PS I take this opportunity of giving what publicity I can to my contradiction of a silly story, which has been going the round of the papers, about my having presented other subjects, and changes in the teaching of algebra, analysis, geometry and statistics over recent years. The second part contains some short articles on support for teachers once they are in post, and the book concludes with two case studies: on the use of distance teaching methods in initial training in Zimbabwe, and secondary school mathematics teaching in China. Overall, this book is rather witty, but contains some valuable source material, especially for anyone interested in mathematics education worldwide.

Perspectives is altogether on a different scale. As the name of the project implies, BACOMET presents an attempt to identify the aspects of mathematics teaching which are fundamental, illustrative, and yet at the same time accessible to intending teachers. Whether this attempt is successful or not, I think depends on the amount of interpreting that the reader is prepared to undertake. Each paper is carefully written, but this book is certainly not intended for the casual reader, an example of "both elbows on the table" reading matter.

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However, the combined effect of all this writing served merely to convince me how far away we are from explaining the ingredients of successful teaching. Given how little we actually know about how an individual child learns, let alone how these difficulties are compounded when we are faced with thirty such individuals, it seems to me that a different "perspective" would be more appropriate. All we can hope to do in a course of initial teacher training is to begin the process of teacher education. For this process to continue it seems important that the teacher should enjoy doing mathematics, and by actually doing mathematics, begin the process of reconstructing her own mathematical knowledge.

A modern reprint of the *Pillow Problems* by Dover Publications is obtainable, by those who wish to see what Dodgson could achieve in solving problems without any visual aid. The inventor considered the *Pillow Problems* as a game for children to play with red and grey counters on a square board divided into four or eight regions. This simple apparatus enabled one to find the logical deduction, if any, from premises such as (i) "All jokes are meant to amuse", and (ii) "No Act of Parliament is a joke".

DONALD EPPERSON

mathematician, but although he confines himself to such elementary topics as geometry, algebra, trigonometry and probability, the would-be solver needs patience, powers of visualization and good memorization in order to find the answer to the simplest of the problems without putting anything on paper.

Mental arithmetic is of value in everyday life - an art which Humpty Dumpty never acquired, as he could not calculate the number of "unbirthdays" in a year of 365 days, until Alice showed him in her memorandum book that 365 - 1 = 354, which convinced him that "unbirthdays" were preferable and should outnumber birthday presents.

Could you calculate mentally the number of "un-Sundays" in a year? Is the answer different in a Leap Year? The beginner would be well advised to develop his or her powers of numerical calculation with some arithmetical problems such as this one which I devised during some wifely moments one night in November 1974, though admittedly it is easier in invent puzzles for oneself than to solve those posed by others.

1. Find the sequence of remainders when 119 is divided in turn by the integers from 2 to 6 inclusive. Can you explain what you discover?

2. Next find the sequence of remainders when 419 is divided in turn by the integers from 2 to 7 inclusive. Can you explain the result?

3. Can you find the smallest number which leaves the sequence of remainders 1, 2, 3, 4, 5, 6, 7 after division in turn by the integers from 2 to 8 inclusive?

If you prefer a geometrical problem, here is one:

4. O is the circumcentre of $\triangle ABC$, and A', B', C' are the reflections of A, B, C in the sides BC, CA, AB respectively. Show that all the sides of the hexagon $AB'CA'BC'$ are equal in length. Is it true that pairs of opposite sides of the hexagon are parallel, and that its opposite angles are $2A, 2B$ and $2C$?

The most intriguing of the *Pillow Problems* was his calculation of the volume of a box with two square and

eight equilateral triangular faces whose net is shown in the diagram. It has 16 equal edges and 8 vertices, and so satisfies Euler's formula $V + F + E = 2$.

If you make two paper models of this Lewis Carroll box, and fix together a pair of their square faces, you will find that the double box has four vertices round its "waist", each of which, paradoxically, is formed by six equilateral triangles that do not make a flat surface.

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Two for trainers

Studies in Mathematics Education
Volume 4: The education at secondary school teachers of mathematics. Edited by Robert Murris.
Unesco £7.50, 92 p 102142 7.

Perspectives on Mathematics Education
Edited by B. Christensen, A. G. Howson and M. Otte.
D Reidel Publishing Company £44.50, 90 pp 1972 2. £18.95, 90 pp 2118 1

In May 1980, Unesco organized a conference in Paris that attempted to identify a set of goals for mathematics education. One of the main conclusions of the meeting was that "the single biggest obstacle to progress in mathematics in most countries in the world was weakness in teacher education, and that assistance in this area of concern should be made available to Member States". The fourth volume in the Unesco series Studies in Mathematics Education is an attempt to fulfil this obligation, and examines in particular the education of secondary school teachers of mathematics.

At around the same time another group of mathematics educators met for the first time to consider what elements might form the basic components of mathematics education for teachers. The so-called BACOMET group met once each year from then until 1984, and *Perspectives on Mathematics Education* is the project's first publication.

Both these books, then, are intended primarily for teacher educators, but there is the similarity ends. *Studies* is essentially a selection of articles covering various aspects of the education of mathematics teachers. The first (and by far the largest) part deals with issues in the initial training of teachers such as problem-solving, gender, the impact of computers on the mathematics curriculum, links with other subjects, and changes in the teaching of algebra, analysis, geometry and statistics over recent years. The second part contains some short articles on support for teachers once they are in post, and the book concludes with two case studies: on the use of distance teaching methods in initial training in Zimbabwe, and secondary school mathematics teaching in China. Overall, this book is rather witty, but contains some valuable source material, especially for anyone interested in mathematics education worldwide.

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DOYLE NURSERY SCHOOL, College Road, London, NW10. Tel: 01-969 2179.

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DEPUTY HEADTEACHER (Group 1)

Required at this well established and equipped school. This is a modern open plan building, situated in a pleasant area with an attractive garden for outdoor play and activities. We are looking for an experienced, lively and enthusiastic teacher committed to good nursery practice. This is a new post and the successful candidate will lead and co-ordinate a team of teachers and nursery nurses.

Applicants should have successful experience of involving parents and the community in the life of the school, and of leading curriculum development from a race and gender equality perspective. Applicants are particularly welcome from members of the black community as they are under-represented in the teaching force. Under the terms of the Race Relations Act, 1976 Section 38(1)(b).

DEPUTY HEADTEACHER - Group 5

LYON PARK JUNIOR MIXED SCHOOL, Vincent Road, Wembley, Middx, HA0 4HH. Tel: 01-902 1479.

Required from SEPTEMBER 1987 -

DEPUTY HEADTEACHER (Group 5)

An experienced and well qualified teacher to play a leading role in the development of the school. The post will carry pastoral, curricular and administrative responsibilities. All applicants should have practical experience of planning an anti-racist, anti-sexist curriculum as well as management expertise and experience in developing successful links with parents and the community. Applicants are asked to state their special interests when applying.

Applications are particularly welcome from members of the black community and as such Section 38 (1)(b) of the Race Relations Act 1976 applies.

CLASSTEACHER - Scale 2

LANGUAGE CO-ORDINATOR - Scale 2

NURSERY TEACHER - Scale 2

BRENTFIELD JUNIOR MIXED & INFANTS SCHOOL, 41 & 43 Meadow

Garth, London, NW10 0SL. Tel: 01-965 5326 (Roll: 298)

Required from SEPTEMBER 1987 -

Experienced CLASS TEACHER (Scale 2) required, to develop and co-ordinate the use of assisted learning computers throughout the whole curriculum and across the full age range of the school.

Required from APRIL 1987 -

LANGUAGE CO-ORDINATOR (Scale 2). Class teacher required to co-ordinate and develop language across the curriculum and throughout the school.

Required from SEPTEMBER 1987 -

An experienced NURSERY TEACHER (Scale 2) required to co-ordinate the work in this active part-time and extended day Nursery. The successful applicant will be able to develop an exciting range of learning experience with four other members of staff.

INFANT TEACHER (Scale 2)

ANSON JUNIOR MIXED & INFANTS SCHOOL, Anson Road, London, NW2 4AB. Tel: 01-452 8552.

Required from SEPTEMBER 1987 -

INFANT TEACHER (Scale 2) for a Middle/Top Infant Class. Available for the development of SCIENCE in the school.

INFANT TEACHER - Scale 1

INFANT TEACHER - Scale 2

NURSERY TEACHER - Scale 1

BRAINTCROFT INFANTS SCHOOL, Warren Road, NW2. Tel: 01-452 6109.

Required as soon as possible -

INFANT TEACHER (Scale 1) with responsibility initially for a Top Infant Class. The successful candidate will join a dedicated staff who provide a stimulating and happy atmosphere for both adults and children.

Required as soon as possible -

INFANT TEACHER (Scale 2) with responsibility for Computer Studies, to join the staff of a large Infant School. The successful candidate will be working with a supportive and enthusiastic staff.

Required as soon as possible -

NURSERY TEACHER (Scale 1) with responsibility for promoting links with the community/assisting with pre-school home visiting. The successful candidate will work in a large Nursery (60 places) under the direction of a Scale 3 Head of Nursery as a teaching member of the team of 3 Nursery Teachers and 2 NNEs.

TEACHER (Scale 2)

INFANT TEACHER (Scale 2)

FURNES INFANTS SCHOOL, Furness

Road, Harlesden, NW10 5YT. Tel: 01-965 4426.

Required from SEPTEMBER 1987 -

TEACHER (Scale 2) trained or experienced in infant music teaching. Will be responsible for developing a music curriculum and teaching instrumentalised music throughout the infant age range.

Required from SEPTEMBER 1987 -

INFANT TEACHER (Scale 2) required in the first instance to take a class of 6-7 year olds. The successful candidate will arrange INSET to enable computers and A/V to be put to full and beneficial use across the curriculum.

ART/CRAFT & DISPLAY

TEACHER - Scale 2

KINGSBURY GREEN JUNIOR MIXED & INFANT SCHOOL, Old Kenton Lane,

Kingsbury, London, NW9 9ND. Tel: 01-204 6423 (Roll: 360)

Required from SEPTEMBER 1987 -

ART/CRAFT & DISPLAY TEACHER (Scale 2) with responsibility for developing and implementing school policy on Art and Craft and for co-ordinating displays throughout the school.

- a small, friendly and exciting Borough
- well served by public transport with easy access to the city and countryside
- Among the best pupil teacher ratios in the country and correspondingly small classes
- a high level of support staff provision in schools
- the assistance of a central team of professional advisers
- a high level of in-service training provision
- excellent terms and conditions including generous allowances for maternity/paternity leave
- hostel facilities available

- Special schools—exceptionally good pupil teacher ratios and purpose-built buildings
- fundamentally committed to multi-cultural education with pioneering policies on race and gender
- full Inner London Allowance of £1215 per annum payable.

TEACHER - Scale 2

CARLTON VALE INFANTS SCHOOL,

Malvern Road, Kilburn, London, NW6 5PU. Tel: 01-424 0348.

Required from SEPTEMBER 1987 -

TEACHER (Scale 2) to take responsibility for A/V and Computers in this semi-open plan school.

TEACHER - Scale 2

LEOPOLD JUNIOR MIXED & INFANTS SCHOOL, Oldfield Road,

London, NW10 9UU. Tel: 01-459 5654 (Roll: 250+)

Required from SEPTEMBER 1987 -

TEACHER (Scale 2) to take responsibility for developing and implementing school policies for R.E. and Social Studies. The staff work co-operatively with colleagues, parents and community towards developing an anti-racist and anti-sexist curriculum.

INFANT TEACHER - Scale 2

WEMBLEY MANOR INFANT SCHOOL,

East Lane, Wembley, HA9 7NW. Tel: 01-904 3725 (Roll: 321)

Required from SEPTEMBER 1987 -

An experienced Infant Teacher for HOME SCHOOL COMMUNITY OVERLAP (Scale 2) to join the staff of a lively multi-ethnic Infant School. Applicants should be prepared to take responsibility for a class, to extend parental involvement, and also to develop positive links between the school and the community. An ability to communicate well and sensitively with people is essential.

MUSIC DEVELOPMENT

CO-ORDINATOR - Scale 2

MORA INFANTS SCHOOL, Mora

Road, NW2 6TD. Tel: 01-452 2634 (Roll: 160 Full time Infants, 60 part time)

Required from SEPTEMBER 1987 -

TEACHER (Scale 2) trained or experienced in infant music teaching. Will be responsible for developing a music curriculum and teaching instrumentalised music throughout the infant age range.

TEACHER OF C.D.T. - Scale 2

TEACHER OF INTEGRATED

CRAFTS - Scale 2 available

ALPERTON HIGH SCHOOL, Stanley

Avenue, Wembley, Middx, HA0 4JE. Tel: 01-902 2038.

Required from SEPTEMBER 1987 -

A teacher of CRAFT, DESIGN & TECHNOLOGY. Applications are invited from a lively, energetic teacher to join a thriving and progressive department in this multi-ethnic comprehensive school. The department has excellent workshop facilities for all courses and modular Technology is well established. The post may be of particular interest to teachers with experience of or enthusiasm for, development in broad-based Technology courses.

The school is committed to implementing an equal opportunities policy in C.D.T. and is keen to present positive role models in all pupils.

Nursery, Social Priority School, SPA Range £201-£276

Required from SEPTEMBER 1987 -

MUSIC DEVELOPMENT CO-ORDINATOR (Scale 2). We need a lively experienced, adaptable class teacher for a 3rd year Infant class to co-ordinate all aspects of Music throughout the school, to work alongside a supportive staff, building up guidelines with an awareness of the needs of the many cultures within the school. Applicants must be committed to the Borough's anti-racist and anti-sexist policy.

TEACHER OF COMPUTER

STUDIES & A/V - Scale 2

NORTHVIEW JUNIOR MIXED & INFANTS SCHOOL, Northview

Crescent, NW10 1RD. Tel: 01-450 7982 (Social Priority School, SPA Range £201-£276)

Required from SEPTEMBER 1987 -

TEACHER OF COMPUTER STUDIES AND A/V (Scale 2). An experienced and enthusiastic Infant/Junior class teacher. The successful applicant will be responsible for the co-ordination of Computer Studies and A/V.

CLASS TEACHER - Scale 2

VICAR'S GREEN JUNIOR MIXED & INFANT SCHOOL, Lily Gardens,

Wembley, GA0 1DP. Tel: 01-997 6734 (Roll: 173)

Required from SEPTEMBER 1987 -

CLASS TEACHER (Scale 2) for Lower Juniors to take responsibility for Mathematics. This is a temporary appointment for 1 year to cover maternity leave. Applications are also welcome from short-term contract Supply teachers who wish to be involved in Curriculum Development.

TEACHER OF C.D.T. - Scale 2

TEACHER OF INTEGRATED

CRAFTS - Scale 2 available

ALPERTON HIGH SCHOOL, Stanley

Avenue, Wembley, Middx, HA0 4JE. Tel: 01-902 2038.

Required from SEPTEMBER 1987 -

A teacher of CRAFT, DESIGN & TECHNOLOGY. Applications are invited from a lively, energetic teacher to join a thriving and progressive department in this multi-ethnic comprehensive school. The department has excellent workshop facilities for all courses and modular Technology is well established. The post may be of particular interest to teachers with experience of or enthusiasm for, development in broad-based Technology courses.

The school is committed to implementing an equal opportunities policy in C.D.T. and is keen to present positive role models in all pupils.

Secondary

DEPUTY HEAD OF CRAFT, DESIGN & TECHNOLOGY - Scale 3

AYLESTONE COMMUNITY SCHOOL,

Aylestone Avenue, London, NW6 7AD. Tel: 01-451 0080 (Roll: 600 + 80 community students, SPA £201-£276 per annum).

Required from SEPTEMBER 1987 or earlier if possible.

DEPUTY HEAD OF CRAFT, DESIGN & TECHNOLOGY (Scale 3). An experienced teacher with well established Faculty in the teaching of Design based, multi-material craft activities. The department is well equipped with five workshops and two drawing offices and it enjoys the services of a full-time technician. The department works closely with the Home Economics and Art Department within the Design Faculty.

Responsibility of an additional community school allowance.

HEAD OF MATHEMATICS

(Senior Teacher Scale)

TEACHER OF GRAPHIC

DESIGN (Scale 3)

HEAD OF COMPUTER

EDUCATION (Scale 3)

C.O.T. TEACHER (Scale 2)

COPLAND COMMUNITY SCHOOL,

Cedl Avenue, Wembley, HA9 7DW. Tel: 01-902 6362.

Required from SEPTEMBER 1987 -

Well qualified and experienced teacher as HEAD OF MATHEMATICS, SENIOR TEACHER SCALE. The Department has a long tradition of outstanding success in public examinations up to and including scholarship level. The successful candidate will play a leading role in extending and

developing the work of the department, especially into areas of mixed attainment teaching. The extra duties attached to the four Senior Teachers in the school are currently under review and it is expected that the Incoming Senior Teacher will have responsibility for public examination administration and statistical returns. This vacancy is the result of the previous postholder's promotion to a Deputy Headship.

Required from SEPTEMBER 1987 -

A TEACHER with the experience, energy and vision to develop all aspects of GRAPHIC DESIGN in the Craft, Design and Technology department of this community school. We are looking for someone to secure the establishment of 'Design and Communication' at GCSE level, and who will seek to influence the graphical aspects of all CDT courses and projects in the department. We also hope that the person appointed will have the flexibility to be able to contribute to the teaching of the CDT 'Design and Realisation' course. This is a [Scale 3] post and the successful candidate will be second in the department. Applications will be particularly welcomed from teachers with a keen interest in race and gender equality issues in the CDT curriculum.

HEAD OF COMPUTER EDUCATION (Scale 3)

A well qualified and experienced teacher to lead

this flourishing department. The role of Computer Education is currently under review.

Required for JUNE or as soon as possible -

C.O.T. TEACHER, SCALE 2

Specialist teacher to teach across the age and ability range of this multi-ethnic 11-18 comprehensive school. The department has 5 specialist rooms and has the support of a technician. In Years 1-3 the timetabling is shared with the Home Economics Department and pupils choose subjects in Years 4 and 5.

In the 6th Form Graphical Communication is taught to 'A' level. Creative Craft is offered as an additional study and there is a Technology Input in CPVE.

Other Posts

INSTRUMENTAL MUSIC

TEACHERS - Scale 2 posts will be available.

INSTRUMENTAL MUSIC

SERVICE

INSTRUMENTAL MUSIC TEACHERS are required from SEPTEMBER 1987 for the following posts which have become vacant due to secondment or promotion. Scale 2 posts will be available to suitably qualified and experienced teachers. All those appointed will be required to work in primary and secondary schools.

STRINGS (Full Time)

Two GUITAR TEACHERS. Successful applicants will join a Department at an exciting stage of development. One DOUBLE BASS TEACHER. A knowledge and experience of Mini-bass teaching would be an advantage.

WOODWIND

3 Full time TEACHERS required, one for each of the following instruments - FLUTE with piccolo, OBDE with Cor Anglais and CLARINET with BASS clarinet or SAXOPHONE. Plus a part time teacher of bassoon for 2/3 days a week.

BRASS

A full time TEACHER with specialist knowledge of TRUMPET is required for a well established department. Ability to offer tuition across the full range of Brass Instruments would be an advantage.

QUALIFIED TEACHERS ARE INVITED TO APPLY FOR THESE POSTS.

UNLESS OTHERWISE STATED APPLICATION FORMS ISAE ARE OBTAINABLE BY CONTACTING THE HEAD

TEACHER, RETURNABLE BY 19th MAY 1987.

Brent is fundamentally committed to multi-cultural education.

Brent is an equal opportunity employer. Applications are welcome from candidates irrespective of race, nationality, ethnic or national origin, age, marital status, gender, religion and gay men and from disabled persons.

London Weighting of £1215 per annum is made in addition to the appropriate Barnham Salary Scale.

BRENT IS AN EQUAL OPPORTUNITY EMPLOYER

SECONDARY ENGLISH

continued

BARNET

LONDON BOROUGH OF

ST. MICHAEL'S R.C.

FLICKY, London N12 7NJ

Tel: 01-464 2556

V.A. Girls 3 form entry.

Required for September 1987.

English and Drama. Full time to work within an active and successful department of five. Opportunities for advancement within the school and beyond.

'A' level. Drama is popular throughout the school and has been a success story. Proficiency will be given to practising. Removal expenses and relocation allowance available.

Apply in writing to Head Teacher with full C.V. and names of two referees. Fee: £10. Closing date: 18th May 1987. 105955

BEDFORDSHIRE

EDUCATION

JOHN VAN OFFER

SCHOOL,

100 Road, Bedford MK42 9TT

Tel: Bedford 64351

Required for September 1987, a teacher of English, scale one, to teach in a department of five specialists.

Applicants will involve all age and ability ranges including a large number of pupils with special needs and some sixth form teaching.

Applicants should be available for a suitably qualified and experienced candidate. The post will also be suitable for newly qualified teachers seeking a first appointment.

Application forms and further details from the headmaster, S.A.E. please. Closing date: 18th May 1987.

An Equal Opportunities Employer. 1319091 132422

BEDFORDSHIRE

EDUCATION

WOLSTENHUP SCHOOL,

1111 Elm Road, Watlington, Bedford MK43 0HT

Tel: Bedford 767125

Required for September 1987, a teacher of English, scale one, to teach in a department of five specialists.

Applicants will involve all age and ability ranges including a large number of pupils with special needs and some sixth form teaching.

Applicants should be available for a suitably qualified and experienced candidate. The post will also be suitable for newly qualified teachers seeking a first appointment.

Application forms and further details from the headmaster, S.A.E. please. Closing date: 18th May 1987.

An Equal Opportunities Employer. 1319091 132422

BEDFORDSHIRE

EDUCATION

SANDY UPPER SCHOOL,

Bedford MK43 0HT

Tel: Bedford 767125

Required for September 1987, a teacher of English, scale one, to teach in a department of five specialists.

Applicants will involve all age and ability ranges including a large number of pupils with special needs and some sixth form teaching.

Applicants should be available for a suitably qualified and experienced candidate. The post will also be suitable for newly qualified teachers seeking a first appointment.

Application forms and further details from the headmaster, S.A.E. please. Closing date: 18th May 1987.

An Equal Opportunities Employer. 1319091 132422

SENIOR PORTAGE

CO-ORDINATOR (£12,600 to

£15,693)

Required from SEPTEMBER or as soon as possible -

A post of SENIOR PORTAGE CO-ORDINATOR has been established under joint funding to facilitate and redevelop the Portage Home Teaching Service in Brent. Portage facilities are already provided by Social Services, the Education Department and the Area Health Authority and this new post will provide exciting opportunities to co-ordinate these existing services and develop new initiatives.

Apart from staff/pupil training and support, an important feature of the co-ordination work will be liaison with agencies involved with families and the community, the maintenance and organisation of resources and, more generally, developing staff and parent initiatives in Portage techniques.

An experienced and suitably qualified professional is looked for who has a background in special needs multi-disciplinary work and with experience of and competence in Portage techniques.

Application forms (see please) and Job Description available from the Education Department, PO

SECONDARY ENGLISH

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Lancashire County Council

An Equal Opportunities Employer welcoming applications from all sections of the community.

Unless otherwise stated the following are required for the first September, 1987 and the closing date is 21st May, 1987. For application forms and further details apply to Headteacher at the appropriate school. (S.A.E. please)

COUNTY AND CONTROLLED SCHOOLS

SECONDARY SCHOOLS

BLACKBURN PLECKGATE HIGH

Blackburn Road, Blackburn (1176 on Roll - mixed 11-16)

SCALE 2 (or 3 for suitably qualified and experienced person). TEACHER TO TAKE THE LEAD IN THE INTRODUCTION OF BUSINESS INFORMATION TECHNOLOGY THROUGHOUT THE SCHOOL.

BLACKPOOL HIGHFIELD HIGH, HIGHFIELD ROAD

Blackpool (958 on Roll)

SCALE 1 - SCIENCE - PHYSICS OR CHEMISTRY TO GCSE LEVEL.

VOLUNTARY AIDED SCHOOLS

In Which the Governors are the Employers

SECONDARY SCHOOLS

POULTON-LE-FYLDE BAINES HIGH

Blackpool (599 on Roll including 140 in 8th Form)

SCALE 1 - MATHEMATICS WITH COMPUTER STUDIES OR GIRLS PE

CHORLEY, HOLY CROSS RC HIGH

Burgh Lane, Chorley (952 on Roll - 11-16)

SCALE 1 - CRAFT, DESIGN AND TECHNOLOGY. PRACTISING ROMAN CATHOLIC PREFERRED.

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**SITTINGBOURNE HIGH RATE
SCHOOL**
Highgate Road, Sittingbourne
ME10 4FT
Required for September, 1982
Second in strong, enthusiastic
mathematical department for
3 years. Good administrative and
teaching ability sought. 13
12+ upper school sixth form
200. Relevant locality.
Interested of application w/
names/addresses of two re-
ferences to the Head, from who
details available.
1370781 13342

enced teacher to coordinate the teaching of Mathematics throughout the School, Secondary.

This area of the School Curriculum presently covers P. 1. to P. 5. Project, Computer Studies and Information Technology.

Application by letter to C. G. as soon as possible Acting Headteacher, M. F. Saker at the School, from whom further details can be supplied. (370951 1334)

ex or any disability you

London N22 5QJ.

EDUCATION

Education Centre which is
in B.I.S. Courses in the
are already well estab-
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lated forms should be

HARINGEY'S FIRST
SCHOOL

COMMUNITY EDUCATION
— J.N.C. conditional
and develop a Commu-
munity which follows the
guidelines and responds

ent team of Headteacher, Teachers and he/she will manage community education work in adult sections, community groups and clubs and a Health Clinic are offered and flourishing programmes of this large school, a notable Community Wing is in use.

above vacancies. Unless
ne and further details may
Chief Education Officer, 49
d should be returned to this

London Allowance £1,215 payable. Removal Expenses
100% in approved cases for permanent posts.

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CARDIFF

DE LA SALLE PRIMARY SCHOOL

GREENWAY ROAD, CARDIFF CF3 8QR

SEPTEMBER 1987

HEADTEACHER

The De La Salle Brothers are withdrawing from De La Salle Primary School, Cardiff. A company limited by guarantee has been formed to take over the school. It plans to expand from the present roll of 110 and extend the age range from 3-11 to 3-13 years, running it as a Catholic School. Candidates must be in possession, or be prepared to obtain, the Catholic Teachers' Certificate.

The Governors are seeking a Headteacher of exceptional ability to take over from the present Headteacher who is retiring, and to lead the growth of the school introducing sporting and social activities in addition to the current excellent academic curriculum. This is a rare and exceptional opportunity for a career minded person to establish a reputation with an excellent school.

The school is able to pay a better than average salary in order to obtain the right person. Letters of application with full C.V. and the names and addresses of referees should be sent to the Chairman, Board of Governors, De La Salle School, Greenway Road, Rumney, Cardiff CF3 8QR.

CLOSING DATE: Friday, 22 May 1987; interviews will be held during the week ending 30 May 1987.

(13413)

WHITFORD HALL SCHOOL

BROMSGROVE, WORCESTERSHIRE

Appointment of HEAD

The Governors invite applications for the Head of Whitford Hall School on the retirement of the present Headmistress in July 1987. The successful applicant would be expected to take up the position in January 1988.

Whitford is a well-established IAPS day-school of 180 pupils for boys (3 to 9) and girls (3 to 13).

Full details may be obtained from:

The Secretary,
Whitford Hall School,
Bromsgrove,
Worcestershire,
B61 7LB.

(12848)

COLLINGWOOD BOYS' SCHOOL

WALLINGTON, SURREY

APPOINTMENT of HEAD

The Governors invite applications for the post of Head to take effect from September 1988 following the retirement of the present Head Master. Collingwood is an Independent Day School established in 1929 and has 200 boys aged 4½-11 years.

Applications are invited in writing together with C.V. and names of 2 referees to the Chairman of the Governors, Collingwood Boys' School Educational Trust Ltd., Springfield Road, Wallington, Surrey SM5 0BD.

Closing date for applications 22nd May 1987.

(14306)

INDEPENDENT EDUCATION

continued

SALFORD

French Teacher Full Time to 12 and 14. Level required immediately. Chemistry Teacher Part Time, to 12 Level required immediately. Computer Teacher required in September.

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COLLEGES OF FURTHER & TERTIARY EDUCATION continued

BEXLEY LONDON BOROUGH ERITH COLLEGE OF TECHNOLOGY

Applications are invited for the following post:

LECTURER GRADE II - STAFF DEVELOPMENT
Required for 1st September 1987 to create and contribute to staff development programme for the College's teaching and support staff, and for staff from other establishments.

Salary: Lecturer Grade II £9,320 - £14,451 inc.

The LEA operates an Equal Opportunities Policy. Application forms and further particulars may be obtained from the Senior Admin. Officer, Erith College in Terlingbury, Tower Road, Ilford, Essex, E11 1AA. Tel: 0181 553 4444. In which they should be returned within fourteen days of the closing date of this advertisement (15/09/87) 220026

BUCKINGHAMSHIRE COUNTY COUNCIL AN EQUAL OPPORTUNITY EMPLOYER Lecturer in Mathematics Employment Opportunity at Milton Keynes Required as soon as possible to teach Mathematics in GCSE level, with additional commitment in three two-year intervals. The ability to assist with additional duties will be an advantage. Further details and application forms from the County Education Officer, 1181, County Hall, Aylesbury MK20 1JZ, Tel: Aylesbury 33000, Ext. 439.

Closing date for applications: 22 May 1987. 220026

CAMBRIDGESHIRE CAMBRIDGE COLLEGE OF ARTS AND TECHNOLOGY East Road, Cambridge CB1 1PT An equal opportunity employer Senior Lecturer in ENGLISH AND GENERAL STUDIES Required from 1st September 1987. Courses tutor for first year 'A' level students in the Faculty of Arts and General Studies. Required to teach 'A' level English Literature and Communication Studies to students from other departments.

Candidates should hold a good Honours Degree, preferably with a teaching qualification and have teaching experience in the role. Salary on Scale SL £12,813 - £16,820/£15,873. Further details and application forms from the Principal, Cambridge College of Arts and Technology, East Road, Cambridge CB1 1PT. Tel: 0223 553422. 220026

CLEVELAND COUNTY COUNCIL An equal opportunity employer LONGLANDS COLLEGE OF FURTHER EDUCATION LECTURER IN ADULT EDUCATION AND TRAINING

Applications are invited from suitably qualified candidates with a sound knowledge of adult education procedures and experience in the field of adult education and ability to control and administer these activities.

Salary: £8,925 - £13,936.

Application forms and further details are available from the Principal's Secretary, Longlands College of Further Education, Douglas Street, Middlesbrough, Cleveland TS4 1JW, to whom completed application forms should be returned within 14 days of the closing date of this advertisement. 131861 220026

EAST SUSSEX LAWES TECHNICAL COLLEGE DEPARTMENT OF BUSINESS EDUCATION Lecturer Grade I in Computer Studies and Information Technology. A suitably qualified candidate, with teaching experience, to teach 'A' level students in the Faculty of Arts and General Studies. Further details and application forms from the Principal, Lawes Technical College, Moorfield Road, Lewes BN2 3AA. Tel: 01323 476131. 220026

DUDLEY HALEBOWEN (TERTIARY) COLLEGE Required for September 1987 TEACHER OF ELECTRONICS (SL Scale) This tertiary college opened in 1982 and has a reputation for excellence in the field of electronics. The college is situated on a very good site near the town of Dudley, in the West Midlands conurbation. Of the 1,200 full-time students, about half are taking 'A' level or equivalent courses. The college is continuing to grow and is seeking a teacher to join the staff in the Electronics Department. The successful candidate will be responsible for the teaching of 'A' level Electronics and for the supervision of the Electronics Department. Further details and application forms from the Principal, Halebowen College, Whitmore Road, Edgbaston, Birmingham B15 2TA. Tel: 021 353 3331. 220026

CUMBRIA CARLISLE TECHNICAL COLLEGE

Applications are invited for the following post:

LECTURER GRADE I PLUMBING/MECHANICAL SERVICES
A suitably qualified candidate, with a good knowledge of plumbing and mechanical services, to teach 'A' level students in the Faculty of Arts and General Studies. Further details and application forms from the Principal, Carlisle Technical College, Moorfield Road, Carlisle CA1 1JW. Tel: 01228 476131. 220026

EAST SUSSEX HASTINGS COLLEGE OF ARTS AND TECHNOLOGY TEMPORARY LECTURER IN ELECTRONICS Required for academic year commencing September 1987. One year appointment. The successful candidate will be responsible for the teaching of 'A' level Electronics and for the supervision of the Electronics Department. Further details and application forms from the Principal, Hastings College of Arts and Technology, The Quadrant, Hastings TN38 0HX. Tel: 04243 425847. 220026

EAST SUSSEX HASTINGS COLLEGE OF ARTS AND TECHNOLOGY TUTOR LIBRARIAN (fixed term appointment - September 1, 1987 to August 31, 1988)

Salary: Barnham Lecturer II point 5 £11,031

To manage a busy college library and to assist in the development of the present post in the Open Learning Federation.

For further details and application forms contact the Staffing Officer, Hastings College of Arts and Technology, Artery Road, Hastings TN38 0HX. Tel: 04243 425847. 220026

HEREFORD AND WORCESTER COUNTY COUNCIL NORTH WORCESTER COLLEGE DEPARTMENT OF HUMANITIES AND SCIENCE

Applications are invited from suitably qualified persons for the post of:

HEAD OF MUSIC, SCIENCE, ARTS AND TECHNOLOGY
The successful candidate will be responsible for the development of the Department of Music, Science, Arts and Technology. Further details and application forms from the Principal, North Worcester College, Bromsgrove, Worcester, WR7 1JW. Tel: 0902 444444. 220026

HEREFORD AND WORCESTER COUNTY COUNCIL NORTH WORCESTER COLLEGE DEPARTMENT OF HUMANITIES AND SCIENCE

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GUERNSEY STATES EDUCATION COLLEGE OF FURTHER EDUCATION LECTURER IN WELDING AND FABRICATION This post has become vacant due to the resignation of the incumbent. The successful candidate will be responsible for the teaching of 'A' level Welding and Fabrication and for the supervision of the Welding and Fabrication Department. Further details and application forms from the Principal, Guernsey College of Further Education, St. Peter's Road, St. Peter, Guernsey GY9 5AA. Tel: 01481 234567. 220026

GUERNSEY STATES EDUCATION COLLEGE OF FURTHER EDUCATION LECTURER IN WELDING AND FABRICATION

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Mid Glamorgan COUNTY COUNCIL Education Department EDUCATION DEPARTMENT LECTURING STAFF

BRIDGEND COLLEGE OF TECHNOLOGY

1. Lecturer in the CARING AND COMMUNITY STUDIES DEPARTMENT.
Applications are invited from suitably qualified and experienced persons to join a team of professional staff in the work of the Caring and Community Studies Department. The successful applicant will be required to teach Education/Child Development and other related subjects to N.E.B. students and to teach when required on C.P.V.E./T.V.E.I. and other courses in the department. Candidates should have suitable qualifications in education, plus practical experience in the Nursery/Nursery Assistant field. Welsh would be an advantage.

The successful candidate will also be required to visit students in establishments of practical training and should be prepared to attend appropriate courses, conferences, career conventions etc.

Salary: £8,843 - £11,886 (with eventual progression to £13,866).

2. Lecturer in MECHANICAL ENGINEERING
(Department of Engineering Technology and Industrial Organisation)
Applications are invited from suitably qualified and experienced persons for the above post. The successful candidate will be required to teach a range of subjects up to S.T.E.C. Higher National Certificate and Diploma Level.

Applicants should possess a minimum of a G.T.E.C. Higher National Diploma/Certificate in Engineering. The ability to offer some computer based work is essential.

The post requires a person who has a good proven practical background in an industrial environment and is prepared and able to support the College in Industrial linked projects.

Salary: £8,843 - £13,866.

Application forms to be returned by 22nd May 1987, obtainable on receipt of a stamped, addressed, self-addressed envelope from the District Education Officer, Bunsall Road, Bridgend CF31 4AR. Tel: 0486 82111.

AN EQUAL OPPORTUNITIES EMPLOYER
E. ROBERTS
DIRECTOR OF EDUCATION (10885)

NEW COLLEGE DURHAM An Institute of Further and Higher Education

SCHOOL OF CONSTRUCTION Lecturer I in Construction Works and Highways

A Lecturer I is required to teach practical skills and associated highways technology up to Advanced Craft Certificate level.

Candidates should possess appropriate Works and Highways qualifications and have considerable industrial experience.

Further particulars and application forms, returnable by Friday, 22nd May, 1987, may be obtained from The Principal, New College Durham, Framwellgate Moor Centre, DURHAM, DH1 5ES on receipt of a stamped addressed envelope.

NEW COLLEGE DURHAM An Institute of Further and Higher Education

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THE SCIENCE MUSEUM
in collaboration with
THE IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY
wishes to appoint a

HEAD OF RESEARCH/ VISITING PROFESSOR

This important new post provides an opportunity to join the Science Museum's staff as one of five Assistant Directors who make up the Museum's senior management group.

As Head of Research you will be involved in the co-ordination and promotion of research activities; the management of the Library and its development as a Research Centre; and be responsible for the computer-based documentation and information systems. As Visiting Professor at Imperial College you will be responsible for the development of the present MSc/PhD course, including teaching

and research, relating to the public understanding of science and technology and the history of technology since 1750.

Salary £25,195-£28,530 with a non-contributory pension scheme.

For further details and an application form (to be returned by 28 May 1987) write to: Civil Service Commission, Alencon Link, Basingstoke, Hants RG21 1JB, or telephone Basingstoke (0256) 465511 (answering service operates outside office hours). Please quote ref: G/7203.

An equal opportunity employer

THE NATIONAL MUSEUM OF SCIENCE AND INDUSTRY

NATIONAL FOUNDATION
FOR EDUCATIONAL
RESEARCH IN
ENGLAND AND WALES



Languages other than French:
TEACHER QUALIFICATION
AND EXPERIENCE

Research Officer

(Post No. LF01)

Applications are invited for the post of Research Officer on a project which will assess the potential for diversifying foreign language provision in schools, by investigating the experience of teachers in the use of language other than French which form part of their qualifications. The project will be carried out in the Department of Foreign Languages at the NFER.

Applicants should have appropriate academic qualifications and, preferably, a background of language teaching. Knowledge of research or survey methods and of assessment would also be useful qualifications. The ability to write clearly for publication is essential.

The appointment is for one year to start as soon as possible. Salary Scale: £10,440-£13,080.

Placement on Scale according to qualifications and experience.

Further particulars and application form are available from: National Foundation for Educational Research, The Mere, Upton Park, Slough, Berks SL1 2DQ. Telephone: Slough (0753) 74123.

The closing date for return of completed application forms is Friday, 22 May 1987, and interviews will be held on 1 June. (19931)



UNIVERSITY
OF
YORK

RESEARCH FELLOW

Applications are invited from graduates for the post of Research Fellow at the Centre for Global Education to:

- (1) undertake in-service training and consultancy work in global education/world studies; and
- (2) develop curriculum materials on gender issues.

School teaching experience at primary/middle school level essential as is knowledge of global education/world studies. In-service experience a strong recommendation.

This is a two year appointment from 1 September 1987.

Starting salary within the range £9,305 to £12,035 per annum, with USS.

Four copies of applications, with full curriculum vitae and naming three referees, should be sent by 19 May 1987 to: Registrar's Department (Appointments), University of York, Heslington, York YO1 5DD. Further particulars are available (tel. 0904-430000 ext. 211). Please quote reference number 77145. (13400)

Adult Education

KENT
COUNTY COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION SERVICE
Lecturer with responsibility
for either languages or food,
nutrition and health. Salary
£6,943 to £11,965.
Application form and full
details from the Area Principal,
Maidstone Centre, St.
Philip's Street, Maidstone,
Kent ME14 1JH. Tel: 0622
52165. 137203. 380000

KENT
COUNTY COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION SERVICE
Head of Department (Senior
Lecturer) responsible for Social
and Community Studies in the
Mid-Kent Area. Salary
£12,015 to £14,890. The
post-holder will be responsible
for the development, organization
and management of all Social
and Community Studies which
includes Adult Basic
Education, English as a Foreign
Language, disadvantaged and
special needs areas of work.
Application form and full
details from the Area Principal,
Maidstone Centre, St.
Philip's Street, Maidstone,
Kent ME14 1JH. Tel: 0622
52165. 137203. 380000



Department of Professional
Studies
LECTURER II/SENIOR
LECTURER
(£8,595/£13,055/£15,873)

Applications are invited for the above post in the Church of England Voluntary College of Higher Education (2000 women and men). The person appointed will be expected to make a substantial contribution to the B.Ed. honours degree programme with particular reference to PRIMARY EDUCATION (Early Years).

The successful candidate will be a practising primary teacher with graduate or equivalent qualifications. Knowledge of language within primary education is essential; an active interest in research would be an advantage.

The appointment will commence from January 1988 or earlier if possible.

Further details and application forms may be obtained from the Personnel Officer, The College of Ripon and York St. John, Lord Mayor's Walk, York YO3 7EX to whom completed forms are to be returned to arrive not later than Monday 1 June 1987. (17099)

Redbridge

London Borough

Institute of Adult Education

Applications are invited for the post of
**ASSOCIATE LECTURER
ORGANISING TUTOR**

from 1st September 1987

to share responsibility for Valentine's Centre (evening) and support an appropriate aspect of the Institute's work (day).

Duties involve:
supervision of courses
support to staff and students
monitoring and improving quality
forward planning/curriculum development

Salary: 0.5 of Burnham F.E. Lecturer 1, currently £8843 - £11865 rising to £13655 and Outer London Allowance £728.

Closing date for applications 22nd May, 1987.

Further information and application forms are available from: The Principal, Redbridge Institute of Adult Education, Greenbrook Road, Ilford, Essex IG2 6HX.
Tel. No: 01-554 6727/4400. (40418)

COUNTY OF AVON

BATH COLLEGE OF HIGHER EDUCATION

FACULTY OF EDUCATION

Lecturer* in Mathematics and Science in Education

Applications are invited for the above post to contribute to professional components on BEd, PGCE and In-Service courses.

Candidates should be well qualified in Mathematics with an additional strength in science and have teaching experience, preferably with infants. Possession of a relevant higher degree would be an advantage. The College would welcome applicants with a particular commitment to and knowledge of multicultural education.

Post tenable from 1 September 1987. Salary LUS £8,595 - £15,873 (under review and subject to Burnham regulations on transfer to Senior Lecturer).

For further details contact the Senior Clerical Assistant (Personnel), Bath College of Higher Education, Newton Park, Bath. Tel: 0226 973701.

Applications returnable by 20 May 1987. (19938)

DEPARTMENT OF TEACHER EDUCATION LII PHYSICS/ELECTRONICS LII PRE-VOCATIONAL EDUCATION (LEARNING DIFFICULTIES)

Salary: £8,595 - £13,055

Applications are invited for the above posts. In one case, the person appointed will be responsible for the initial training of FE teachers in those course components which relate to teaching strategies and curricula specific to the teaching of physics and electronics. For the other post, the person appointed will contribute to PGCE and Certificate in Education courses and will be responsible for planning and teaching options on programmes for course members with a special interest in teaching FE students with learning difficulties.

Application forms and further particulars are available from the Deputy Registrar, (Ext. 3006), to whom completed forms should be returned by 21 May 1987. (13417)

BOLTON INSTITUTE OF HIGHER EDUCATION
Deane Road, BOLTON BL3 0AB

Somerset County Council
AN EQUAL OPPORTUNITIES EMPLOYER

HM Prison Shepton Mallet, Somerset

A vacancy exists for a Lecturer 1 in Business Studies to join a team of full- and part-time tutors at HM Prison, Shepton Mallet. The programme is offered over 50 weeks of the year and the intention is to develop business education for students with limited experience who would hope to be self-employed on release. An interest in computing and/or the use of computers in the classroom would be an advantage.

The successful applicant will be appointed to the staff of Strouds Tertiary College, Street.

Closing date for application is 20 May 1987. Application forms and further particulars available from the Principal, Strouds College, Church Road, Street, Somerset BA16 0AB. (0458) 42277. (19499)

ADULT EDUCATION SERVICE

TEACHERS OF COMMUNICATION SKILLS — THREE POSTS

Burnham Further Education Lecturer II —
£8,595-£13,055 — One Post
Burnham Further Education Lecturer I —
£8,843-£11,965 — Two Posts

Applications are invited for three posts, funded under Section 11 arrangements, from persons who have experience as an Adult Education Teacher. Appointments are being made to provide communication skills teaching for adults who either speak English as a second language or are from an Afro-Caribbean background. The second language or area from an Afro-Caribbean background. The second language or area from an Afro-Caribbean background. The second language or area from an Afro-Caribbean background.

Further details and an application form are available from: The County Education Officer (CRDAE), Education Department, Floor 3, Northampton House, Northampton NN1 2HX (a.s.p.). The closing date for applications is two weeks from the appearance of this advertisement.

Education
Northamptonshire
welcomes applications regardless of marital status, sex, race and disability

Youth and Community Service

GRAMPIAN REGIONAL COUNCIL

SEATON
NEIGHBOURHOOD
YOUTH PROJECT
Aberdeen

This exciting Project is managed by a committee of local people and has been running for a year 3 years. It is a full-time project and is currently seeking a full-time project worker.

An energetic and enthusiastic person is required to tackle this demanding job. As part of a team of 3 workers, major responsibilities include development of existing welfare rights advice, work with young people, including summer play, scheme and development of youth work with girls across the area.

Applicants must hold an appropriate Youth and Community work qualification, or equivalent, and have substantial full-time relevant experience.

Salary: Scale 1 - £8,640 - £10,935.

Application forms and further details from: Director of Manpower Services, Woodhill House, Aberdeen AB9 2LU. Applications should be sent to: Aberdeen 682877. Closing date for applications: May 18th. Ref: 354/87755. 1319561. 440000

LANCASHIRE COUNTY COUNCIL

An Equal Opportunities Employer welcomes applications from all sections of the community.

AREA YOUTH WORKER
Lancashire County Council
Salary: LANCASHIRE 3
£0,305 - £10,401 per annum

Required for Preston District Youth Centre, Preston, Lancashire. The post holder will be responsible for the day-to-day running of the Youth Centre, Preston, Lancashire. The post holder will be responsible for the day-to-day running of the Youth Centre, Preston, Lancashire.

Application forms from: Education Officer, 56/60 Oulton Road, Preston, Lancashire. Closing date: 21st May 1987. 1432023. 440000

Leisure Services Youth and Community

Youth Work Opportunities in Nottinghamshire

Our Service is changing to meet the needs of all young people. Our Teams of Workers will be multi-skilled to reach young people in a variety of settings. We are looking for committed, qualified men and women who are able to work in a Team or be self-motivating.

Detached Workers (3 posts)

£9,309-£10,401 p.a.

Hucknall Urban Team Family of Clubs

The Worker will be based at the newly built Hucknall Youth Centre, attached to a large Leisure Centre in the District of Ashfield, and be part of the Hucknall Team.

The work will be contacting young people not using existing services. Please quote ref. V8/8145.

Beeston/Stapleford Urban Team Family of Clubs

The Worker will be based at Beeston Youth Centre in the district of Broxtowe, and be part of a Team of full and part-time staff, complementing building based work by contacting young people not using existing services. Please quote ref. V8/7145.

Manfield Urban Specialist Team

Based in Manfield, the post holder will be part of a large Team of full and part-time staff. The work of the team is to support existing provision including that at the refurbished Westfield Folkhouse Youth Centre. Please quote ref. V8/8145.

Coffee Bar Worker

£9,309-£10,401 p.a.

Newark Town Centre Urban Team Family of Clubs

Based in Newark, the Coffee Bar, with additional facilities, is open day and evening. The team covers the Newark Town area and includes building based and outreach work. The team consists of full and part-time staff. The Coffee Bar Worker will develop the specialist work of the Coffee Bar. Please quote ref. V8/8145.

Relocation expenses where appropriate.

For further information of the above posts contact Maryline Livermore on Nottingham (0602) 824220 or Derek Ode on Nottingham (0602) 824203.

Application forms and job descriptions are available by writing to the Personnel Services Department at Trent Bridge House, Fox Road, West Bridgford, Nottingham, accompanied by a self-addressed envelope. Closing date 26 May. Please quote appropriate post title and job reference when applying.

An Equal Opportunity Employer

Nottinghamshire
County Council
County Hall - West Bridgford
Nottingham NG2 7BP

1134301

RECREATION AND COMMUNITY SERVICES DEPARTMENT

Assistant Youth and Community Workers
JNC — £7,416-£9,309

Three new jobs have been created in Birmingham's developing youth and community services for JNC qualified workers to assist in the organisation, supervision and development of youth and community activities in the respective Centres and neighbourhoods. These are ideal opportunities for newly qualified workers or those seeking experience within a large urban council.

Assistant Youth and Community Worker Mere Green Centre, Sutton Coldfield Area

Based in Sutton Park, the Mere Green Centre was formerly an infants school which has been converted for youth and community work. The additional worker will help promote and develop the current seven day per week programme under the guidance of the neighbourhood worker.

Internal enquiries to David Foster on 021 355 3534. Ref: 371.

Assistant Youth and Community Worker Mirfield Centre, Hodge Hill Area

A wide range of facilities for community groups, formal and informal adult education classes and youth activities are provided throughout the week at this Centre, which is seen as the main base for community activities in the Lee Village and The Green neighbourhoods. The Youth and Community worker will have a particular responsibility for developing youth work at the Centre.

Internal enquiries to Philip Smigajski on 021 783 3741. Ref: 378.

Assistant Youth Worker Nechells Green Community Centre, Small Heath Area

Opened in 1982, the Nechells Green Community Centre caters for young people and adults from an inner city area where unemployment and the number of single parent families rank amongst the highest in Birmingham. The Centre is a popular venue for young people participating in a variety of specialist sporting activities.

Internal enquiries to Gary Abraham on 021 823 7441. Ref: 378.

Women, people with disabilities and from minority groups are under-represented amongst applicants for this type of work and applicants would be particularly welcome from these groups. Only applications from JNC qualified workers will be considered.

For further written details and an application form (returnable by 29 May 1987) telephone 021 238 4283 (24 hour answering service) or write to The Officer, City of Birmingham Recreation and Community Services Department, Audley House, Five Ways, Birmingham B16 1QS.

Quote job ref. (16953)

Birmingham

An equal opportunities employer.

EDUCATION DEPARTMENT — YOUTH SERVICE

Appointment of Principal Youth Leader

Henry Brown Youth Centre,
West Howe, Bournemouth

JNC Range 4 Points 3-7: £11,046 - £12,327 (award pending)

Applications are invited from qualified, enthusiastic and experienced persons for this exciting and demanding post based in purpose built premises on a large post-war housing estate.

The person appointed will lead a team of two other full-time youth leaders, up to ten part-time, resident care taker, part-time secretary and volunteers.

In-service training opportunities and personal support is provided and assistance with removal/relocation expenses will be available in approved cases.

For informal discussions please telephone Bernard Dowling on Bournemouth (0202) 201163.

Further details and application forms from the Area Youth Office, Education Department, Portman House, Richmond Hill, Bournemouth, BH2 6ER.

Closing date 22nd May, 1987. (1007621)



DORSET
County Council



An immediate vacancy exists for a
**METHODIST
YOUTH OFFICER**

To serve in the East Anglian District. If you are a committed Christian, are Youth Work or Teacher trained, have experience of working with adults and some creative ability, you may be the person we are looking for.

Salary: Soulbury Scale for Youth and Community Service Officers, Main Range, Points 2 to 6.

Details: Mr David M. Dalziel, The Methodist Church Division of Education and Youth, 2 Chester House, Pages Lane, Muswell Hill, London N10 1PR.

Closing date: 28th May 1987. (1169901)

EDUCATION & RECREATION DEPARTMENT YOUTH SERVICE YOUTH OFFICER

(Training and Staff Development)
Salary: £13,383 - £14,016
(Including London Weighting)
(Soulbury Main Range Points 2-6)
Qualified Youth Worker with substantial training experience required to join a team of Professional Staff in the continuing development of Marton's Youth Service.

The postholder will be a member of the Youth Officer Team which has a key role in the formulation and implementation of policies appropriate to developmental work with young people in a multi-ethnic community. The successful applicant will be responsible for the organisation and development of a comprehensive programme of training and support including the Brunel Basic Training Scheme, and will work with the Principal Youth Officer to establish an effective Staff Development Policy. The capacity to enable adults to work in a participative way with young people is essential.

For an informal discussion telephone Peter Miller, Principal Youth Officer on 01-545 3850. Further particulars and application form from the Director of Education and Recreation (Youth), Crown House, London Road, Morden, Surrey SM4 5DX.

Closing date: Friday 22nd May 1987.

LONDON BOROUGH OF

merton

Merton is an Equal Opportunities Employer.
All applications will be considered on their merits.

WILTSHIRE COUNTY COUNCIL EDUCATION DEPARTMENT YOUTH & COMMUNITY WORKER

Greendown Community Centre
Swindon

JNC 3 (1/5) £9,054 - £10,122

Applications are sought from suitably qualified and experienced candidates for this post at the new purpose built community school which opened in September, 1988. There is a purpose built youth suite within the building. The Youth & Community Worker will be responsible to the Youth & Community Service and will be responsible to the Head. The Youth & Community Worker will be responsible to the District Youth & Community Service Officer for his/her professional competence and for his/her youth and community work in the Western Expansion area of Swindon.

This provides a very exciting opportunity for someone seeking to develop their experience in youth work based at a community school. Potential applicants might wish to speak to Gordon Evans (Trowbridge 3641 Ext. 2347) or Ian Matthews (Swindon 874224).

Further details and application forms are available from the Chief Education Officer, County Hall, Trowbridge, BA14 6JB. Tel. Trowbridge 3641 ext. 2460. Please quote Ref. E.86.642. Application forms returnable by 22nd May 1987.

AN EQUAL OPPORTUNITIES EMPLOYER

Somerset County Council AN EQUAL OPPORTUNITIES EMPLOYER

Somerset Education and Cultural Services Committee
Westfield and Preston Schools, Yeovil
Youth Worker

Salary Scale JNC 3 (1-8)
£9,054 - £10,122 (pay award pending)

Applications are invited from qualified Youth/Community Workers for appointment to this challenging new post with a brief to work with these two mixed comprehensive schools in developing the provision of youth opportunities on and off site, with particular emphasis on opportunities for girls and young women.

Full details of the post and application forms are available from the Head, Westfield School, Stibby Road, Yeovil, to whom they should be returned by 18 May 1987 (see please).

WARWICKSHIRE COUNTY COUNCIL EDUCATION DEPARTMENT DIRECTOR OF HONILEY HALL

Salary: Southern Youth and Community Service Officers
Main Range 1-5: £11,967 - £15,449

Applications are invited for a post based at Honiley Hall Residential Youth Centre, near Kenilworth. The successful candidate will be responsible for all aspects of the management of the unit and will be expected to participate in the training programme. Applicants should have teaching or youth service experience.

Application form and further particulars may be obtained from the County Education Office, 23 Northgate Street, Warwick CV34 4EP. Please enclose S.A.E. and three recent photographs.

Director of Honiley Hall, Warwick CV34 4EP. Tel. 0945 35341. Ext. 3534.

Closing date 15th May 1987.

Warwickshire is an Equal Opportunities Employer.

1516161 480000

Overseas Appointments

BAHAMAS

St. Andrew's School
Nassau, Bahamas

St. Andrew's School is an independent, all-boys, co-educational school catering to 100 boys in Bahamian and international student body of 700. The school is housed in a modern building on a 35 acre site.

Teachers required for September, 1987:
1. Head of French (with some Spanish).
2. Head of Spanish.
3. Teacher of English with some Spanish.

Applicants for post 3 and 4 should have at least three years recent relevant experience.

Three years teaching experience, a recognised degree and professional training.

3. Teacher of English with some Spanish.

4. Teacher of English with some Spanish.

Applicants for post 3 and 4 should have at least three years recent relevant experience.

Three years teaching experience, a recognised degree and professional training.

3. Teacher of English with some Spanish.

4. Teacher of English with some Spanish.

Applicants for post 3 and 4 should have at least three years recent relevant experience.

Three years teaching experience, a recognised degree and professional training.

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4. Teacher of English with some Spanish.

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Three years teaching experience, a recognised degree and professional training.

3. Teacher of English with some Spanish.

4. Teacher of English with some Spanish.

Applicants for post 3 and 4 should have at least three years recent relevant experience.

Teachers of Home Economics, Food & Nutrition, Clothing & Textiles

What a job we have finding you!

Skills taken for granted in this country are vital to members of poorer Third World communities. In a world which by and large does nothing about poverty and injustice (let alone hunger), VSO volunteers work directly with those seeking to become more self-reliant.

No one can change the world. But as a VSO volunteer, you could make a world of difference. VSO is looking for teachers of Home Economics, Food & Nutrition, Clothing & Textiles. We have received requests from Kenya, Belize, Sierra Leone, Antigua and Nigeria for people with skills in these areas. For most of these posts a teaching qualification is required and some experience is often an advantage.

You should be without dependents and willing to work for the local rate of pay. Postings are for two years - although many choose to stay longer - and most UK employers should be prepared to grant leave of absence.

For more information, please complete and return.

VSO
Voluntary Service Overseas
100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

VSO
Voluntary Service Overseas
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EDUCATION DEPARTMENT

Adviser for Sex Equality

Soulbury HT Group 7 - £15,666 - £17,146 + £795 + Casual Car User Allowance

Qualified teachers with appropriate experience are invited to apply for this new post in the Education Advisory Service.

Applicants should currently be on Scale 3 or above with a record of successful teaching experience and/or INSET work with teachers in both Primary and Secondary Schools, and have experience of working in a multi-racial urban area.

The main task will be to assist in the implementation of the Council's Equal Opportunities Policy in curriculum, INSET and school policies.

Waltham Forest is a multi-racial area and we are anxious to ensure this is reflected in our workforce. We welcome applications from people regardless of ethnic origin, sex or disability.

Further details and application form from Recruitment Officer, Personnel Department, Town Hall, Forest Road, London E17 4JF. (Tel. 01-531 8899 - 24 hour answering service).

Please quote ref G184/TES.

Closing date 22nd May.



(04254)

EDUCATION DEPARTMENT - CAREERS SERVICE

SENIOR CAREERS OFFICER

Reyligh Careers Office

SO1 £10,569 - £11,271

Post Number: C0897

In addition to the normal duties of a Careers Officer, the Senior Careers Officer will be responsible for the general organisation and administration of the Careers Office.

Candidates should hold the Diploma in Careers Guidance and have suitable experience within the Careers Service.

Interested applicants may telephone Mrs A Hine on Southend 336133 for an informal discussion.

Generous relocation expenses payable in appropriate cases.

Application forms and further details are available from (see please) County Education Officer (P), PO Box 47, Thredneedle House, Market Road, Chelmsford CM1 1LD. Telephone: (0245) 267222 ext 2826.

Closing Date: 15th May 1987.

(04281)



ADMINISTRATION L.E.A. continued

PRINCIPAL OFFICER (SPECIAL NEEDS)

£15,345 - £16,506 p.a.

Required in the Schools Section of the Education Department for principal responsibilities relating to the professional co-ordination of support services on behalf of individual pupils, together with the direction of the Education Welfare Service. You should have considerable managerial skills, the ability to promote good working relationships with a wide ranging personnel, and a clear commitment to equal opportunities policies.

You should hold a professional qualification equivalent to degree level and have wide experience in the field of education. Relevant teaching experience, preferably at a senior level, could be an advantage as would experience of living or working in an ethnic minority community.

Closing date: 22.5.87.

Ref: ED389

Application forms obtainable from the Personnel Office, Room A/204, Town Hall Annex, New Broadway, Ealing W5 2BY. Tel: 01-840-1995 (24 hour service). Please quote appropriate reference.

Pathway Further Education Centre

TEMPORARY LECTURER GRADE II

Language Development in a Bi-Lingual Context

This vacancy has arisen initially for one year due to the secondment of the present post-holder to a Borough-wide project. Your main duties will be to promote the professional career development of teachers from ethnic minority groups particularly in the areas of English as a Second Language and Community Languages. The following courses are currently running: RSA TESLA diploma, RSA diploma Community Languages, Foundation Courses in teaching Community Languages, Advanced Communication Skills, and pre-entry refresher courses for ethnic minority teachers.

Experience in teaching on these courses and of leading a team is essential.

We are willing to consider secondment posts.

Application forms and further particulars from the Head of the Centre, Pathway FE Centre, Havelslock Campus, Havelslock Road, Southall, UB2 4NZ. Tel: 01-571 2241.

Closing date: 22.5.87.

Ealing's new Council welcomes applications from all regardless of sex, race, ethnic origin, responsibility for dependants, from people with disabilities and from lesbians and gay men.

(13441)



SHROPSHIRE COUNTY COUNCIL (An Equal Opportunity Employer)

COUNTY EDUCATION OFFICER

£29,421 to £32,037 p.a.

The Council wish to recruit a successor to the present County Education Officer, who will retire in October.

Applications are invited from individuals with appropriate academic and professional qualifications, experience of teaching and with considerable experience of management in a local education authority.

The County Education Officer is a member of the Chief Officers' Management Team. Further details and application form for the post may be obtained from:

Personnel Officer,
Shropshire County Council,
Shirehall,
Abbey Foregate,
Shrewsbury, SY2 6ND.
Telephone: Shrewsbury 262808

The completed application forms must be returned no later than 27th May 1987.

(13426)

COUNTY INSPECTORATE

Applications are invited for the following post within the County Inspectorial and Advisory Service. The successful candidate will be expected to take up appointment on 1st September 1987.

SENIOR COUNTY INSPECTOR (Primary) Soulbury

(Burnham HT Group 10) £19,260 - £20,766

To have a general role in one area of the County and to hold a special responsibility for Primary Science and Technology.

Applicants for this post should have suitable qualifications and experience as Headteachers or Advisers.

Previous applicants will automatically be reconsidered. Closing date: 20th May 1987.

Generous relocation expenses payable in appropriate cases.

Application forms and further details from (see please) County Education Officer (P), PO Box 47, Thredneedle House, Market Road, Chelmsford CM1 1LD. Telephone: Chelmsford 267222 ext 2826.



LONDON BOROUGH OF MERTON

EDUCATION COMMITTEE

GENERAL INSPECTOR

with special responsibility for

POST-16 EDUCATION

to join a hard working and committed team. The LEA is currently planning to re-organise its Schools and hopes to establish a Sixth Form College which, with Merton College, will be major centres for Post-16 Education.

Wide experience of teaching, preferably in Further and Secondary Education essential. In addition to these general duties, the person appointed will be expected to carry out specialist duties in areas of the curriculum where he/she have special qualification and experience.

SOULBURY HEAD TEACHER 9

Salary: £16,075 - £19,587 (under review)

plus Inner London Allowance

Application forms and further details are available from the Director of Education & Recreation, Crown House, London Road, Morden, Surrey SM4 6DX. Tel. 01-546 3264.

Closing date: 13th May, 1987.

Merton is an Equal Opportunities Employer. All applications will be considered on their merits.

Buckinghamshire County Council

An Equal Opportunity Employer

ASSISTANT EDUCATION OFFICER (SCHOOLS)

PO4/5 (£14,862 - £17,160 p.a.)

This post covers a wide range of duties within the Schools Section. Applicants should be good honours graduates with experience in teaching and in LEA administration.

Further details and application forms from Chief Education Officer, County Hall, Aylesbury HP20 1UZ

(Tel: Aylesbury 395000 Ext 8128)

Closing date: 22 May 1987

(04417)

EDUCATION DEPARTMENT - CAREERS SERVICE

SENIOR CAREERS OFFICER

Gray Careers Office

SO1 £10,569 - £11,271 + £225 Outer Fringe Allowance

Post Number: C0878

In addition to the normal duties of a Careers Officer, the Senior Careers Officer will be responsible for the general organisation and administration of the Careers Office.

Candidates should hold the Diploma in Careers Guidance and have suitable experience within the Careers Service.

Closing date: 24th May 1987.

Application forms and further details are available from (see please) County Education Officer (P), PO Box 47, Thredneedle House, Market Road, Chelmsford CM1 1LD. Telephone: Chelmsford 267222 ext 2826.

Generous relocation expenses payable in appropriate cases.



(04248)

ADMINISTRATION - LEA

continued

HUMBERSIDE

CAREERS OFFICER 013677

(Minimum Salary for an Officer with the O.C.O. Part II £8,391 Scale 4/5)

SEVERLY CAREERS OFFICE

To undertake group, individual guidance and advice work based at the Severly Careers Centre. Severly is a thriving market town and developing tourist centre. The main County Council offices are based here and there is therefore a predominance of clerical and administrative employment. It also acts as an employment centre for an important rural hinterland and provides a wide range of commercial and retail facilities and some manufacturing industry.

The area is served by five 11-12 schools, three of which are in Severly itself and the others in Market Weighton and Focklington. Severly College of Further Education provides a wide range of courses and the County's Agricultural College is also based here. Severly is a pleasant area to live in and there is a variety of housing. A varied caseload is likely to involve work in at least two schools, with opportunities for work with economically more able, and in one of the colleges, with opportunities for work with adult clients. In addition there will be work with the youth and with the unemployed.

Candidates should preferably be experienced careers officers and hold a Diploma in Careers Guidance. To obtain application forms please write enclosing a stamped addressed envelope to: Humberside County Council, The Director of Education, 100 Victoria Road, Hull, Humberside, YO1 1JL. Closing date: 22nd May 1987.

Humberside County Council - working towards Equal Opportunities (01482) 400000

SUNDERLAND

BOROUGH OF SUNDERLAND EDUCATION DEPARTMENT

DESIGN & TECHNOLOGY

£11,271 - £18,273 (Burnham

Scale 4/5)

Applications are invited from suitably qualified and experienced applicants for this important post and provide a special challenge. The successful candidate will be responsible for the design and development of a new course in Design & Technology in the Borough of Sunderland. The successful candidate will be responsible for the design and development of a new course in Design & Technology in the Borough of Sunderland. The successful candidate will be responsible for the design and development of a new course in Design & Technology in the Borough of Sunderland.

ADVISER FOR MODERN LANGUAGES £18,273 - £19,273 (Burnham Scale 4/5)

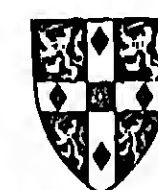
Applications are invited from suitably qualified and experienced teachers for this important, new post in the Authority's expanded Advisory Service. Responsibilities will include initiating and co-ordinating curriculum development in Modern Languages. Proven success at a senior level is essential. There will also be a more general commitment within one of three area teams into which the Inspectorial and Advisory Service is being restructured.

ADVISER FOR PRIMARY EDUCATION £18,273 - £19,273 (Burnham Scale 4/5)

Applications are invited from suitably qualified and experienced teachers for this important, new post in the Authority's expanded Advisory Service. Responsibilities will include initiating and co-ordinating curriculum development in Primary Education. Proven success at a senior level is essential. There will also be a more general commitment within one of three area teams into which the Inspectorial and Advisory Service is being restructured.

There is a scheme for assistance for re-location expenses. Application forms and further details are available from the Director of Education, P.O. Box 101, Town Hall and Civic Centre, Sunderland, Tyne and Wear, NE1 1JL. Closing date: 22nd May 1987. (131678) 480000

DURHAM COUNTY COUNCIL



EDUCATION DEPARTMENT

Deputy Director of Education

Salary Scale: £22,692 (by £570 x 4) - £24,972

Applications for this post, which will become vacant on 30th June, 1987, are invited from graduates with appropriate teaching experience and substantial educational administrative experience in a major and progressive local authority. The successful applicant will assist the Director of Education with the organisation and administration of the County Council's function as Local Education Authority.

Application forms, which must be returned by 28th May, 1987 and further particulars are available from the Director of Education, County Hall, Durham, DH1 5UJ, or by telephone on Durham (091) 386 4411, Ext. 2283.

Durham County Council is an equal opportunity employer. (18699)

CO-ORDINATOR FOR A SCHEME TO DEVELOP POSITIVE APPROACHES TO PUPIL BEHAVIOUR IN SECONDARY SCHOOLS (Scale 4)

Required from September 1987 or January 1988, to co-ordinate a pilot project. Applicants should be well qualified and have successful experience in at least one of the following areas: Personal and Social Education; In-Service Education; GRIDS.

The Co-ordinator will work as part of a team, sharing expertise, developing a curriculum strategy and initiating staff development. The contract will be permanent to the Authority although consideration will be given to a secondment from a teaching post.

Removal and relocation expenses of c.£4,000 are available for those who qualify.

Form and details from County Education Officer, PO Box 47, Thredneedle House, Market Road, Chelmsford, Essex CM1 1LD. Tel. (0245) 267222 Ext. 2826.

Closing date 22nd May 1987.

(140411)



Professional Assistant P.O.2 £13293 - £14391 inclusive

Applications are sought from well qualified teachers or lecturers, with sound and varied experience, to work initially in the Schools Division, which has responsibility for most aspects of primary, secondary and special schools.

The successful applicant will have a varied role including working on the development of governing bodies and later experience of specific assignments with other divisions. The post provides initial training and useful experience for an entrant to educational administration.

Application forms from the Director of Education, The Civic Centre, Lampton Road, Hounslow TW3 4DN. Tel: 01 570 7728 ext: 3621.

Closing date: 18 May 1987.

(04268)



Working For Quality INSPECTORS (2 POSTS)

£17,895 to £19,363 p.a. Pay award pending.

Ealing is a Borough with particular education needs and a large Asian and Afro-Caribbean school population.

We are looking for committed and enthusiastic individuals with experience of working in a multi-racial educational environment, who can make a significant contribution to the work and quality of the Ealing Education Service.

We are looking for expertise in one or more of the following areas: Science and Technology; Business Studies; Information Technology; Primary Education; Humanities.

Closing Date: 18/5/87. Ref: EO 394.

Application forms obtainable from the Personnel Office, Room A/204, Town Hall Annex, New Broadway, Ealing W5 2BY. Tel: 01-840-1995 (24 hour service). Please quote appropriate reference.

Ealing's new Council welcomes applications from all regardless of sex, race, ethnic origin, responsibility for dependants, from people with disabilities and from lesbians and gay men. (04444)

Senior Assistant Education Officer (Continuing Education)

Salary: £19,353 - £20,718

including London Weighting

Applications are invited from graduates with successful teaching and administrative experience for this key third tier post. The postholder will be responsible to the Chief Education Officer for the management of a major sector of the Service which includes Further and Adult Education, Manpower Services Commission initiatives, Grants and Awards to Students, INSET administration, the Youth and Community Service and for the work of the Careers Service.

The Authority is at present undertaking consultation about the possible introduction of a tertiary college in September 1988.



Application forms and further details available from Chief Education Officer, Town Hall, Barking, Essex IG11 7LU. (Please enclose photocopy s.e.s.) Closing date 22nd May 1987. (13310)

Education Department An Equal Opportunity Employer

SHEFFIELD COUNCIL Working for a better City

Adviser for Primary Education

Soulbury HT Group 9 £18,075 to £19,587

Advisory Service, Leopold Street, Sheffield S1 1RJ

Applicants for the above post will be expected to show significant and relevant teaching experience at a senior level in a school in the 3-13 year old age group. This post offers a challenging and exciting opportunity to make a major contribution to a child-centred integrated learning approach in individual schools, through being assigned to a group of schools in relation to general educational issues and to the in-service training programme in an Authority in the fore-front of developments in this field.

The successful applicant will be based at the Education Department and will work with a team of advisers.

Interviews for this post will take place on 28th May 1987.

APPLICATION FORMS AND FURTHER DETAILS ARE AVAILABLE FROM THE CHIEF EDUCATION OFFICER (SHEFFIELD), PO BOX 67, LEOPOLD STREET, SHEFFIELD S1 1RJ. TEL: 0742 735764.

CLOSING DATE: 18TH MAY.

We particularly welcome applications from women, black people and people with disabilities for all our posts. (13410)

An Equal Opportunity Employer



SENIOR CAREERS OFFICER (SCHOOLS WORK)

SO1 £10,569/£11,271

Applications are invited from qualified Careers Officers for the above post. The appointee will act as team leader, under the direction of an Assistant Principal Careers Officer responsible for the schools work of the Careers Service.

APPLICATION FORMS, to be returned by 22nd May, and further details, are available from the Personnel Officer, Personnel Services, Town Hall, Bolton BL1 1RU (Tel: Bolton 381632). Registered Disabled Persons are invited to apply. Trade Union Membership is a condition of service.

An Equal Opportunity Employer

(04007)

Somerset County Council AN EQUAL OPPORTUNITIES EMPLOYER

ASSISTANT EDUCATION OFFICER (Further Education Development)

Salary PO6 (£13653 - £14862)

For 1st September 1987, a graduate with good experience of further education, appropriate skills and qualities and an interest in educational administration to fill this new post, the duties of which will centre largely but not exclusively on the work-related NAPE planning process and the introduction of new budgetary procedures for the Authority's colleges.

Application form and further details (see please) from the Chief Education Officer, Staffing (NT) Section, Education Department, County Hall, Taunton, Somerset TA1 4DY. Closing date 28th May 1987.

(0410)

SHROPSHIRE EDUCATION AUTHORITY

ADVISER FOR POST-16 AND PASTORAL EDUCATION

Soulbury HT Group 9

This newly established post is aimed at strengthening the Authority's support for F.E. and other post-16 education. The person appointed will also have a responsibility for the development of Pastoral and Personal and Social Education across the Secondary/FE sector in schools and colleges. Candidates should have successful teaching experience relevant to the post, and a significant part of this experience should have been gained in the FE system. Experience of involvement in staff and curriculum development work is also desirable.

Application forms and further particulars from The County Education Officer (GEN/6), Education Department, Shirehall, Shrewsbury (and s.o.s. please) returnable by 21st May 1987.

(40308)

CAREERS OFFICER

Scale 5/6 £8391-£10184

An extra post has been allocated to the Careers Service and applications are invited from qualified officers, including those due to complete training this summer. The successful candidate will be based in Newport with a responsibility for school work, including some independent schools. In addition there will be involvement with YTS.

Previous industrial experience would be an advantage as would an interest in the use of computers. The post will commence from 1 September 1987.

The Island offers an excellent environment in which to work and live, with good educational and leisure facilities. Property prices are cheaper than most areas of the south; assistance with removal expenses, excellent user car allowance and car loan facilities are offered.

Application form and further details from the County Personnel Officer, County Hall, Newport, Isle of Wight PO30 1UD. Telephone (0983) 524081 Ext 127/346.

Closing Date: 21 May.

(16999)

Isle of Wight COUNTY COUNCIL

KIRKLEES An Equal Opportunity Employer

METROPOLITAN COUNCIL

Directorate of Educational Services

ASSISTANT EDUCATION OFFICER (SCHOOLS)

Salary: Grade PO (B) £13,653 - £14,862

HQ, Huddersfield.

Applications are invited for this vacancy from graduates with good teaching and administrative experience in a responsible post. Duties will relate to government, management, staffing and policy issues for schools maintained by the Authority. Initially these duties will be concerned with secondary schools but it is envisaged that there will be a rotation of duties.

Application forms and further particulars (a.a.f.e. please) from the Director of Educational Services, Staffing Section, Oldgate House, 2 Oldgate, Huddersfield, HD1 6GW to whom completed forms must be returned within 14 days of this advertisement quoting Job No. 6785.

(40432)

Kirklees operates an Equal Opportunities policy, full details of which will be supplied to all applicants.
The Council operates a Trade Union Membership agreement.

THE HAMPSHIRE CONSORTIUM FOR ART DESIGN AND ARCHITECTURE

Winchester School of Art

Consortium Administrator and
Chief Administrative Officer

Grade PO8 (£13,653 - £14,862)

For this post we seek a person whose career is in educational management, who is conversant with current issues in education and who is an innovator; background may have been in further and higher education, other branches of the public service or in industry and commerce. The Hampshire Consortium is a partnership of colleges bringing together all the resources of further education, design and architecture in Hampshire. The person appointed will play a major role in establishing the Consortium's systems.

Details from the County Education Officer, Hampshire County Council, The Castle, Winchester, Hampshire, SO8 1BA, or telephone Winchester (0474) 514 474, Fax: (0474) 514 475.

Hampshire is an equal opportunity employer. Applications are invited from people with disabilities.

(40436)

MERTON LONDON BOROUGH OF MERTON

EDUCATION
DEPARTMENT
ADVISER FOR
MATHEMATICS

Soulbury Group 9 (a) present £18,075 - £19,587

Ref. KP/PA/W/MA/10
Adviser

Applications are invited for the challenging post of Adviser for Mathematics. The successful candidate will be responsible for the development and implementation of the Society's education policy; this includes a commitment to parents' rights, equal opportunities and the practical implementation of the Society's ethnic minority initiative.

We are looking for a Qualified Teacher of the Deaf, or someone with experience in the education of deaf children, and with good administrative skills. An interest in education of younger children and/or aural/oral education would be welcome. Applications from hearing impaired candidates welcome.

Closing date for applications: Friday 15th May 1987.

Further details about the above post may be obtained from: The Director, The National Deaf Children's Society, 45 Hereford Road, London W2 5AH.

THE NATIONAL DEAF CHILDREN'S SOCIETY
45 HEREFORD ROAD LONDON W2 5AH TEL: 01-828 2218

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WARWICKSHIRE COUNTY COUNCIL

EDUCATION
DEPARTMENT

ADVISER FOR
MATHEMATICS

Soulbury Group 9 (a) present £18,075 - £19,587

Ref. KP/PA/W/MA/10

Adviser

Applications are invited for the challenging post of Adviser for Mathematics. The successful candidate will be responsible for the development and implementation of the Society's education policy; this includes a commitment to parents' rights, equal opportunities and the practical implementation of the Society's ethnic minority initiative.

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ASSISTANT EDUCATION OFFICER

Salary £11,984-£13,682 (including London weighting) depending on qualifications and experience.

The NDCE Education Service, based at the National Office in London, provides information and advice to parents and professionals and contributes to the Education Sub-committee to the development and implementation of the Society's education policy; this includes a commitment to parents' rights, equal opportunities and the practical implementation of the Society's ethnic minority initiative.

We are looking for a Qualified Teacher of the Deaf, or someone with experience in the education of deaf children, and with good administrative skills. An interest in education of younger children and/or aural/oral education would be welcome. Applications from hearing impaired candidates welcome.

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MIDLAND EXAMINING GROUP General Certificate of Secondary Education

APPOINTMENT OF CHIEF EXAMINERS

Applications are invited for Chief Examiner appointments for the 1988 examination in the following subjects:

BUSINESS AND TECHNOLOGY (MATURE)
GEOGRAPHY SYLLABUS M (MATURE)

Further details from The Secretary, East Midlands Regional Examinations Board, Robins Wood House, Robins Wood Road, Aspley, Nottingham NG8 3HR.

FRENCH (MATURE)
Further details from The Secretary, Oxford and Cambridge Schools Examinations Board, Elmsfield Way, Oxford OX2 8EP.

SCIENCE IN SOCIETY (MATURE)
Further details from The Secretary, Oxford and Cambridge Schools Examinations Board, 10 Trumpington Street, Cambridge CB2 1QB.

GERMAN (MATURE)
MATHEMATICS (MATURE)
Further details from The Secretary, University of Cambridge Local Examinations Syndicate, 1 Hills Road, Cambridge CB1 2EU.

The closing date for the receipt of all applications for the above posts is 22nd May 1987.

(14305)

Miscellaneous

ALTERNATIVE PDR
TEACHERS. Use professional skills in new employment. Private tuition. Handwriting. From Teaching into Writing. All levels. £2.25 each. 0604 881885 or Write Centre. Hamilton House, Pellingham, Strickland, Northampton, 1041481. 660000

BIRMINGHAM
REPERTORY THEATRE
GRAND ANIMATOR
Birmingham
Theatre wishes in Repertory to develop a new programme of community touring. The Theatre wishes to appoint someone with knowledge and understanding of professional theatre, and good teaching ability. Salary: £10,000 per annum. Details upon receipt of a.s.a.f. from the Associate Director, Birmingham Repertory Theatre, Broad Street, Birmingham B1 2ET. (15163) 660000

DISAPPOINTED BY PAY
AWARD? In need of advice? Here is an opportunity for a professional secretary to help you to realise substantial cash benefits on a part-time basis. As much as £30.00 per hour is possible. For full details please send a.s.a.f. to Wexham Educational Consultants, 17, Manor Road, Yoxford, Somerset, BA15 2JZ. 660000

HAVE YOU GOT WHAT IT TAKES TO BE A CHILDREN'S SUMMER CAMP DIRECTOR?

Director required for Day and Residential Camps for mid July until end of August 1987. Salary up to £2,000 for the season. Tel: 08074 6025 for further details, or write to: Dantley, Camp, Beaumont, Medway, Kent, SE15 8JL. 660000

PRACTISE YOUR LANGUAGES
Paying Guest stays arranged in U.K. France, Germany, Spain and Italy. Also Perm/Temp. Au Pairs. Places in U.K. with choice of language. LIES. Contact Mrs. Rutter, 1058, Kings Road, London SW6 2DX. Tel: 731 5340. (151021) 660000

ARE YOU HAPPY WITH THE REWARDS FOR YOUR HARD WORK?

I WASN'T!...

1983 PE Teacher Salary £10,300
1988 Financial Management Consultant earnings £28,000

A sales career in financial services does reward hard work and ability.

We provide the training, products and administrative support to help you build your own business.

As an ex-teacher, I will gladly tell you my story.

For further details, contact Roger McKibbin, Allied Dunbar Assurance plc, 78/78 Red Lion Street, London WC1R 4NA. Telephone 01 404 4599 (N.B. Greater London and Home Counties only).

We are an equal opportunities group. Applications are welcome regardless of sex, marital status, ethnic origin or disability.

**ALLIED
DUNBAR**

PERSONAL FINANCIAL GUIDANCE

Publicity Assistant Educational Publishing

Collins Educational is the successful and established schools publishing division of Collins Publishers. Our list is growing rapidly as is our market share, and we need an enthusiastic and intelligent Publicity Assistant who, reporting to our Publicity Manager, will become part of a small committed team. You will need some experience or appreciation of the needs of schools and teachers, to work on all aspects of our busy catalogue and leaflet programme. This is an ideal opportunity for someone with one or two years experience, or the right qualities, to develop a career in educational marketing. We offer an attractive salary together with the benefits expected from a large successful organisation. To apply, please write with a c.v., indicating current salary to:



Roy Devey,
Sales & Marketing Director,
Educational,
COLLINS PUBLISHERS
8 Grafton Street,
London W1X 3LA.

Collins Publishers

Considering a change of career?

EDUCATION DEPARTMENT

Primary Holiday Activity Centres - 27th July - 21st August 1987

Temporary Staff for Holiday Activity Centres required from 27th July to 21st August 1987, at our holiday Activity Centres open in Schools within the Borough. The Centres will cater for children from 7-11 years of age and will provide indoor and outdoor games, sports, activities etc. from 9.00am to 4.00pm each weekday.

Supervisors

Must be qualified, experienced teachers. Ref: G189. Rate of pay: £24.41 per day (award pending).

Senior Assistants

Must be qualified, experienced teachers. Ref: G170. Rate of pay: £20.00 per day (award pending).

Assistants

Persons suitably experienced in working with children. Ref: G171. Rate of pay: £17.60 per day (award pending).

Clerical Assistants

Must be experienced in clerical duties. Ref: G172. Rate of pay: £3.61 per hour (16 hours per week).

Application forms available from Chief Education Officer, London Borough of Waltham Forest, Municipal Offices, High Road, Leyton, London E10 5DQ. Please quote appropriate reference numbers.

SPECIAL CENTRES

Temporary staff are also required for the same period for two special school centres, i.e. one catering for physically and sensory handicapped children, and one for children with moderate and severe learning difficulties. Applicants should state clearly the centre they wish to apply for.

Senior Assistants

Must be qualified teachers, having appropriate experience with children attending special schools. Ref: G173.

Assistants

Persons suitably experienced in working with children with special needs. Ref: G174.

Rate of pay: Rates of pay will be based on the rates for Primary centres as above, with additional special school allowance paid as appropriate.

Waltham Forest is a multi-racial area and we are anxious to ensure this is reflected in our workforce. We welcome applications from people regardless of ethnic origin, sex or disability.

Application forms upon receipt of S.A.E. from Chief Education Officer, London Borough of Waltham Forest, Municipal Offices, High Road, Leyton, London E10 5DQ. Please quote appropriate reference numbers.

Closing date: 22 May.



DESK EDITORS (2)

Modern Languages (1)

Secondary English (1)

ARNOLD-WHEATON, the educational publishing division of E.J. Arnold is expanding again. We are currently looking for people with publishing and/or teaching experience to fill the above positions based at our Head Office in Leeds.

The two people appointed will join a team of desk editors to work on publications in the above subject areas where specific knowledge would be useful. The main duties will involve copy preparation and proof reading, briefing artists and designers, liaison with authors and the organisation of sound recordings.

Modern Languages - we are looking for a French and Spanish specialist who will be able to contribute fully to the development of new French and Spanish publications.

Secondary English - we are looking for someone with classroom experience and knowledge of current educational developments. A thorough knowledge of the language arts at all levels would be advantageous.

The ideal candidates will be 23-40, creative, capable of working largely unsupervised, to strict deadlines and with great attention to detail.

Training will be provided where necessary.

If you are looking for the above type of opportunity, please write with full career details including present salary to:-

Mr. N.C. Maite, Personnel Manager,
Arnold-Wheaton, E.J. Arnold & Son Ltd.,
Parkside Lane, Dewsbury Road, Leeds LS11 6TD.
Closing date for applications 22nd May, 1987.

All vacancies are open to all persons irrespective of sex, race or disability.

MISCELLANEOUS

LONDON W8

THE AMATEUR ROWING ASSOCIATION INVITES APPLICATIONS FOR THE POST OF NATIONAL ROWING COACH

Candidates should have experience in both rowing and coaching.

The successful candidate is likely to be a mature person having some experience of teaching. A full qualification in rowing is essential. The successful candidate will be expected to work from the ARA Headquarters at Hambleton, East Sussex, and will be required to hold a current driving licence as a car will be provided.

Candidates should currently be earning not less than £15,000 per annum.

Applications giving a recent history should be sent in confidence to: Executive Secretary, Amateur Rowing Association, 6 Lower Mall, London W6 6JG to arrive no later than Thursday, May 6th, 1987.

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NORFOLK

COUNTY COUNCIL

RECRUITMENT

The Norfolk Music Service

is seeking for the Autumn Term 1987

to recruit a

string teacher

to teach

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Esbourne

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English graduates with

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Please send this coupon together with your payment to Linda Bartlet, The Times Educational Supplement, Priory House, St John's Lane, London EC1M 4BX. This offer is open to new subscribers only and closes on 30 June 1987.